CONTENTS OF SUPPLEMENT.

PERSONAL 135
Obituary 135
ENGINEERING SOCIETIES 135
Coming Technical Meetings 135
NEW PUBLICATIONS 136
Trade Publications 136
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 136
Railways 136
Street and Electric Railways 137
Electric Light and Power 138
Bridges 138
Buildings 139
Water-Works 139
Sewerage 140
Garbage Disposal and Street Cleaning 140
Streets and Roads 141
Manufacturing Plants 141
Gas Plants 141
Miscellaneous Contracts 141
Contract Prices 142
INDUSTRIAL NOTES 143

PERSONAL.

Mr. A. M. True, Superintendent of Water-Works, of Canton, O., has resigned, to take effect March 1, 1898.

Naval Constructor J. J. Woodward, U. S. N., has been ordered to duty as Superintendent of Construction at Newport News, Va.

Chief Engineer A. B. Willits, U. S. N., has been ordered to Thurlow, Pa., to succeed Chief Engineer G. S. Willits as Inspector of Steel.

Mr. James Leland Crider, civil engineer, of Martinsburg, W. Va., was married, Oct. 6, to Miss Anna Belle Snodgrass, of that place.

Mr. Herbert Miller McIntosh, city engineer, of Burlington, Vt., was married recently to Miss Nellie Lucretia Tollman, at Saratoga Lake, N. Y.

Mr. D. A. Hitchcock, civil, consulting and inspecting engineer, of Detroit, Mich., has moved his office from 33 Cleland Building, 29 and 31 State St., to 1413 Majestic Building.

Mr. Charles A. Hague, M. Am. Soc. C. E., M. Am. Soc. M. E., of New York city, has resigned as consulting engineer of the York Water Co., York, Pa., and Mr. Henry Berkinbine, of Philadelphia, Pa., has been appointed to succeed him.

Mr. W. D. Kearfott, Ohio Manager for Henry R. Worthington, with office at Cleveland, O., has resigned and has opened an office in the Wade Building, in that city, where he will engage in a general engineering business and as manufacturers' agent for machinery.

Lieutenant Clement A. F. Flagler, Corps of Engineers, U. S. A., has been ordered to Willets Point, N. Y., for duty with the battalion of engineers. Lieutenant Edwin R. Stuart, Corps of Engineers, has also been ordered to Willets Point, for duty at the U. S. Engineer School.

Mr. Alfred Allen Stuart, M. Am. Soc. C. E., Chief Engineer with Mr. Colin McLean, of New York, was married Oct. 6 to Miss Agnes Booth. Mr. Stuart was until recently Chief Engineer of the Wilson & Baillie Mfg. Co., of Brooklyn, N. Y.

Maj. William R. Livermore, Corps of Engineers, U. S. A., has been appointed a member of the Nicaragua Canal Commission, to succeed Capt. Oberlin M. Carter, Corps of Engineers, resigned. Major Livermore is a native of Massachusetts, and was graduated from the U. S. Military Academy, West Point, N. Y., in 1865, being then appointed as First Lieutenant in the Corps of Engineers. He served as Assistant Engineer in the construction of Fort Taylor, Key West, Fla., until July, 1868, except for four months in 1866, when he was with the Engineer Battalion at Willets Point, N. Y. In 1869 he was on the Geodetic Survey of the Northern Lakes, and in 1870 was promoted to Captain and placed in command of the Engineer Company at Willets Point. From 1878 until 1886 he was Chief Engineer of the Department of Texas, and was a member of the Boundary Commission between the Indian Territory and Texas from 1885 to 1887. Since 1887 he has been a member of various engineer boards, among them the board appointed to consider and report upon the subject of constructing "a harbor of refuge" at Point Judith, R. I. He is at present Engineer of the First and Second Light-house Districts.

OBITUARY.

Capt. Peter Hogan, civil engineer, of Ballston Spa, N. Y., died this week, aged 70.

Gen. Minor T. Thomas, civil engineer, formerly with the St. Paul & Pacific R. R., now a part of the Great Northern system, died at Minneapolis, Minn., Oct. 2, aged 67.

Mr. Zephon Flower Walker, civil engineer and surveyor, of East Athens, Pa., died last week, aged 73. He was formerly in the service of the Lehigh Valley R. R. as a draftsman.

Mr. Peter E. Studebaker, Second Vice-President and Treasurer of the Studebaker Bros. Mfg. Co., wagon-makers, of South Bend, Ind., died at Alma, Mich., Oct. 9, aged 61.

Mr. J. J. Philbrick, President of the Key West Gas & Electric Light Co., Key West, Fla., died recently, aged 57. He was born in Keene, N. H., and went to Key West as Paymaster at the United States Naval Station.

Mr. Howard L. Edson, Assistant Engineer in the Engineering Department, of Boston, Mass., died Oct. 8, aged 26. He was born in Weymouth, Mass., and graduated from Tufts College, College Hill, Mass., in 1891.

Mr. Lemuel Ammerman, President of the Lackawanna Valley Traction Co., and the Blossburg Water Co., died at Blossburg, Pa., Oct. 8, aged 51. He was also Vice-President of the Spring Brook Water Supply Co., Wilkes-Barre, Pa., the Scranton & Pittston Traction Co., the Brookside Coal Co., and the Mansfield Water Co. He was a member of the Fifty-second Congress, and was Controller of Scranton in 1887.

Mr. William Augustus Stiles, Park Commissioner, of New York city, and Editor of "Garden and Forest," died Oct. 6, in Jersey City, N. J. He was born near Deckertown, N. J., Mar. 9, 1837, and graduated in 1859 from Yale College, New Haven, Conn. Soon afterwards he visited California for his health and accepted an instructorship in a private seminary, but soon resigned to enter the service of the Union Pacific Ry., in its engineering corps. While engaged in this work he overstrained his weak eyesight and was compelled to give up his work, returning to his home by way of Panama. When he reached Deckertown he was entirely blind and was an invalid for more than a year. During his illness he devoted much time to the study of botany and horticulture and had soon become an expert in these subjects. In 1888 he was selected as the Editor of "Garden and Forest," at the time that journal was established, and the standard it attained was largely due to Mr. Stiles' ability and judgment. Mr. Stiles was also Editor of the agricultural department of the Philadelphia "Press" and was a frequent contributor to various magazines and journals of articles on botany, literature and music.

Mr. George E. Mann, M.Am. Soc. C. E., Chief Engineer of the Grade Crossing Commission, of Buffalo, N. Y., died Oct. 3. He was born in that city in 1844 and graduated from Dartmouth College, Hanover, N. H., in 1866, as a civil engineer. Shortly after his graduation he entered the engineering department of the Lake Shore R. R. and assisted in the construction of the stone arch culverts between Buffalo and Erie. In 1868 he went to California and entered the Department of Bridges and Buildings of the Central Pacific R. R. The following year he was transferred to the Western Pacific and placed in charge of the tunnel work through the Diabalo Mountains. He returned to Buffalo upon the completion of this work and was Division Engineer on the Buffalo & Southwestern R. R. until 1873, when he was elected City Engineer of Buffalo, serving until Jan. 1, 1878. At the latter date he was appointed Chief Engineer and General Superintendent of the Buffalo & Rock City Pipe Line Co., and Superintendent of the Atlas Oil Works, until the time that the plant was sold to the Standard Oil Co. In 1888 he was re-elected City Engineer, retaining the position until 1893 when he resigned and was made Chief Engineer of the Grade Crossings Commission, into which his position had been merged.

Mr. William Barnes Bennet, the retired head of the firm of Bennet, Miles & Co., manufacturers of machine tools, of Philadelphia, Pa., died suddenly Oct. 6, at his home in that city. He was born in Bradford, N. H., May 10, 1817, and in 1834 apprenticed himself to Moore & Colby, of Petersboro, N. H., manufacturers of cotton and woolen machinery. In three years he had become Superintendent of the works and very shortly took the place in the firm of a partner who withdrew. In 1840 he entered the service of the Amoskeag Machine Works, Manchester, N. H., and two years later was induced to take charge of a manufactory of woolen machinery in Mishawaka, Ind., but the latter works burning down while he had returned to the East for his family, he found himself upon his return to Mishawaka homeless and without employment. He went to work as a blacksmith and gunsmith, and soon afterwards his inventions having gained him notice he was made Superintendent of the shops of the St. Joseph Iron Co. In 1847 he returned to New England and undertook contracts to build cotton and woolen machinery for the Lowell Machine Shops, Lowell, Mass., and ultimately assumed management of the pattern and designing departments. In 1851 he went to Philadelphia, and with his nephew, Mr. G. A. Colby and Mr. E. D. Marshall, established the Industrial Works. In 1855, upon their consolidation with the Frederick B. Miles Machine Works, the firm became Bennet, Miles & Co. The business has continued to grow until at present 450 hands are employed and castings weighing 19 tons have been made. In 1888 Mr. Bennet resigned the management to his sons and retired from active business. He was a Director of the American Academy of Fine Arts and of the Academy of Design for Women.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

CHICAGO ELECTRICAL ASSOCIATION.
Oct. 15. "Evolution of the Isolated Electric Plant," Harold Almert. Secy., J. R. Cravath, 825 Monadnock Bldg.
ENGINEERS' CLUB OF COLUMBUS.
Oct. 16. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.
ENGINEERS' CLUB OF PHILADELPHIA.
Oct. 16. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.
ENGINEERS' CLUB OF MINNEAPOLIS.
Oct. 18. Secy., Elbert Nexsen, 1020 S. E. 4th St., Minneapolis, Minn.
TECHNICAL CLUB OF OMAHA.
Oct. 18. Secy., J. Harry Lawrie, Omaha, Neb.
WESTERN FOUNDRYMEN'S ASSOCIATION.
Oct. 18-20. Autumn meeting, Cincinnati, O. Secy., A. Sorge, Jr., 1020 Monadnock Block, Chicago, Ill.
ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Oct. 19. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.
ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 19. Annual convention, at the Brown Palace Hotel, Denver, Colo. Secy., S. F. Patterson, B. & M. R. R., Concord, N. H.
AMERICAN STREET RAILWAY ASSOCIATION.
Oct. 19, 22. Annual convention at Niagara Falls, N. Y. Secy., T. C. Penington, Chicago.
COLUMBIAN ENGINEERING SOCIETY.
Oct. 19. Secy., F. W. Hart, 15th and H Sts., N. W., Washington, D. C.
WESTERN RAILWAY CLUB.
Oct. 19. "Washing Out Locomotive Boilers," John Mackenzie; "Steam Heat for Passenger Cars," Wm. Garstang. Secy., F. M. Whyte, 225 Dearborn St., Chicago.
BOSTON SOCIETY OF CIVIL ENGINEERS.
Oct. 20. Secy., S. E. Tinkham, City Hall, Boston, Mass.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Oct. 20. Frank H. Olmsted, Los Angeles, Cal.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
Oct. 20. Secy., C. W. Hunt, 127 E. 23d St., New York city.
ENGINEERS' CLUB OF ST. LOUIS.
Oct. 20. Secy., Richard McCulloch, St. Louis, Mo.
AMERICAN GAS LIGHT ASSOCIATION.
Oct. 20—22. Annual Convention at Old Point Comfort, Va. Secy., Alfred E. Forstall, Montclair, N. J.
ENGINEERS' CLUB OF CINCINNATI.
Oct. 21. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.
NEW YORK RAILROAD CLUB.
Oct. 21. Secy., W. W. Wheatly, 168 Montague St., Brooklyn, N. Y.
WISCONSIN POLYTECHNIC SOCIETY.
Oct. 26. Secy., W. K. Means, Loan & Trust Bldg., Milwaukee, Wis.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
Oct. 27. Secy., R. W. Pope, 26 Cortlandt St., New York City.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
Oct. 28. Secy., C. H. McLeod, 112 Mansfield St., Montreal, Ont.
ENGINEERING ASSOCIATION OF THE SOUTH.
Oct. 28. Secy., L. P. Brown, Nashville, Tenn.

THE JOHNSTOWN ENGINEERING SOCIETY.—The second session of this society was held Oct. 6 in Johnstown, Pa., at which Mr. E. Wise, electrician for the Cambria Iron Co., read a paper on "Electricity."

WESTERN SOCIETY OF ENGINEERS.—At the meeting on Oct. 6 the evening was devoted to a general discussion on the points of engineering interest visited during the recent trip to the East, described in our issue of Sept. 30, a somewhat full description being given of the great plant of the Bethlehem Iron Works.

MONTANA SOCIETY OF ENGINEERS.—At the meeting on Sept. 11 the subjects discussed were mining operations, tunnel rights, and the action of mineral in the water of mines upon the pumps and pipes. Mr. Goodale stated that after a considerable amount of experimenting he has succeeded in partially obviating the difficulty by treating the water before entering the pipes.

A. S. Hovey, Secy.

MICHIGAN ENGINEERING SOCIETY.—The annual meeting of the Board of Directors of this society was held at Lansing, Mich., Sept. 15. A by-law relative to honorary membership was prepared and approved by the directors. It was decided to invite the members of the Ontario Land Surveyors' Association to meet with us at Port Huron. Every effort will be made to provide an attractive and instructive programme. F. Hodgman, Secy.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.—At the meeting on Oct. 4 a paper was presented by Henry Vier, entitled "A Description of that part of the Grade Crossing Improvement Work recently completed by the New York Central & Hudson River R. R. Co."

Suitable resolutions were passed in respect to the memory of Mr. Geo. E. Mann, the society's first president, whose death occurred Oct. 2, 1897. Henry Vier, Secy.

BROOKLYN ENGINEERS' CLUB.—The regular meeting of this club was held Oct. 7 at the Clarendon Hotel. Owing to the absence of the president, Mr. A. J. Caldwell, the meeting was called to order by the vice-president, Mr. Walter M. Meserole. The usual regular business was transacted, after which Mr. J. C. Meem, assistant engineer in the Department of City Works, read a paper entitled "A Study of a Proposed Method for Building a Submerged Tunnel."

CHICAGO ELECTRICAL ASSOCIATION.—The following papers are on the program for the present season:

Oct. 15: "Evolution of the Isolated Electric Plant," Harold Almert.

Nov. 5: "The Safe Current Capacity of Electrical Conductors," C. H. Sewall.

Nov. 19: "Daily Mathematical Conveniences," S. G. McMeen.

Dec. 3: "Heavy Electric Traction," Cloyd Marshall

Dec. 17: "Electricity in Shipbuilding," C. C. Mattison.

Jan. 7: "Electrical Shop Transmission," H. G. Dimmick.

Jan. 21: "The Art of Constructing Telephone Apparatus," Henry P. Clausen. J. R. Cravath, Secy.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.—A meeting of this society was held Oct. 4. Mr. C. A. Alderman read a paper on the Chippewa Valley Electric Ry., an up to date system of about 22 miles nearly completed. Power is to be furnished for 20 years at $6 per HP. Mr. Alderman also described the late trip of the Western Society of Engineers to Niagara.

Mr. Loweth exhibited the results of some paint tests—twenty odd samples of black and more or less rust roughened plates of sheet iron which had undergone six months' exposure to locomotive smoke while suspended from the roof of the Union Depot train shed about 50 ft. above the tracks. The iron plates, new and bright, had each received one coat of paint and had been subjected to equal

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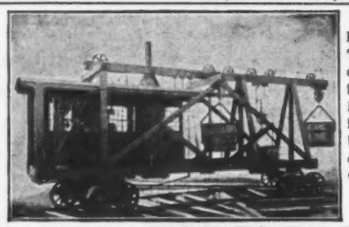

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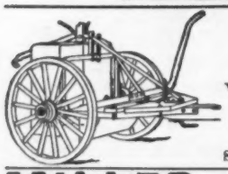

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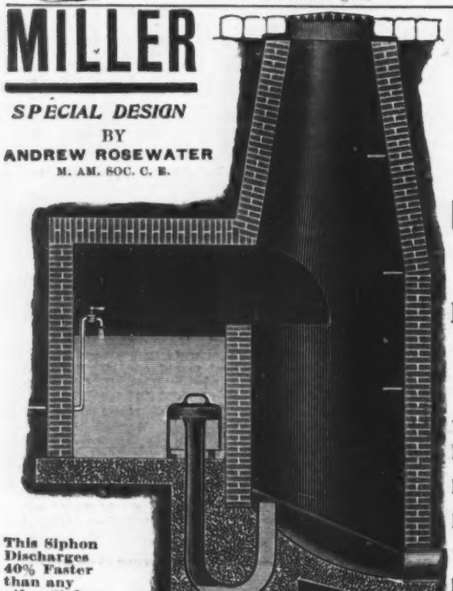

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ELECTRIC LIGHT FRANCHISE.

SOMERSET, KY.

Notice is hereby given that the City of Somerset, in the City Hall, in Somerset, Ky., at about the hour of 10 o'clock a. m., on the 13th day of December, 1897, will publicly receive bids for the sale of a franchise, for the term of twenty (20) years, to light the streets of said city by means of electricity, and to furnish commercial lights by electricity to the citizens thereof.

Said franchise will be awarded to the highest and best bidder, the right to reject any and all bids being reserved.

Full information can be had by application to the Mayor or City Clerk.

This September 1st, 1897.

F. R. GRIFFIN,
Mayor.

JNO. H. WHEELOCK,
City Clerk. 40-3t

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

Sealed bids addressed to the Board of Trustees of the Sanitary District of Chicago will be received by the Clerk of the Sanitary District at Room 1110 Security Building, Chicago, Illinois, up to 12 m. (standard time) of Wednesday, November 10th, 1897, and will be publicly opened by the said Board of Trustees at the regular meeting held that day or at a special meeting called for that purpose.

The work for which said tenders are invited is:

First—The excavation of a channel, designated as "The Tail Race," and the building of the embankments, masonry core, highway approaches and all collateral work necessary or incident to the said tail race, as described and specified in the detail specifications furnished by the engineer.

Second—The construction of a "Weir Dam" of masonry, and the work collateral thereto, as described in the detailed specifications furnished by the engineer.

Each bidder may make alterative propositions, one upon the basis of his being awarded both divisions of the work, and one for each division of the work, independent of the other, and the Board of Trustees may award all the work to one bidder, or may award the tail race to one bidder and the weir dam to another, reserving the right, however, to reject any and all bids.

A certified check or cash to the amount of three thousand dollars ($3,000) must be deposited with the bid for each division of the work, but two such checks or deposits will be accepted as covering the entire work on the basis of alternative propositions. All certified checks must be drawn on some responsible bank doing business in the City of Chicago, and be made payable to the order of the Clerk of the Sanitary District of Chicago. Said amount of three thousand dollars ($3,000) for each division of the work will be held by the Sanitary District until all of said bids have been canvassed and the contract awarded and signed, the return of said check or cash being conditioned upon any bidder to whom the award of said work may be made appearing within ten (10) days after notice of such award being given, with bondsmen, and executing a contract with the Sanitary District for the work so awarded, and giving a bond satisfactory to the said Board of Trustees for the fulfillment of the same in the amount of sixty thousand dollars ($60,000) for the tail race and fifteen thousand dollars ($15,000) for the weir dam.

All bids must be made upon blank forms furnished by the Sanitary District, and must give the price for each separate class of work or material called for by the specifications.

The bids will be compared on the basis of the prices bid per cubic yard applied to the Engineer's approximate estimate of quantities added to the lump sum price for any portion of the work upon which a lump sum may be asked.

No bid will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his ability and experience in this class of work, and that he can control sufficient capital to enable him successfully to prosecute same in case the contract therefor shall be awarded him.

Bidders are required to state in their bids their individual names and places of residence in full.

Specifications and plans may be seen at the office of the Chief Engineer, Room 1010 Security Building, Chicago, Illinois.

The said Board of Trustees reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO.
By THOS. KELLY,
President of its Board of Trustees.

Attest:
JAS. REDDICK, Clerk.
Chicago, September 8, 1897. 40-4t

CITY ROADS AND PAVEMENTS.

BY WILLIAM PIERSON JUDSON, M. Am Soc. C. E., M. Inst. C. E.

CONTENTS.

Chapter I.—Local Conditions, Oswego, N.Y.
" II.—Various Pavements.
" III.—Wood-Block Pavements.
" IV.—Stone-Block Pavements.
" V.—Asphalt Pavements.
" VI.—Broken Stone Roads.
" VII.—Clay-Gravel Roads.
" VIII.—Vitrified Brick Pavements.
" IX.—Conclusions—Local Applications.

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Commonwealth of Massachusetts.

HARBOR AND LAND COMMISSIONERS' OFFICE,
ROOM 131, STATE HOUSE,
BOSTON, October 1, 1897.

Sealed bids or proposals endorsed "Proposals for Building Pier on South Boston Flats" will be received by the Board of Harbor and Land Commissioners, Room 131, State House, Boston, Mass., until 12 o'clock noon of Thursday, October 28, 1897, and then and there will be publicly opened and read.

All proposals must be made upon a blank form which, with plans and specifications, may be found at the office of the Board, and will be required to be in a gross sum for the entire work.

Each bidder will be required to give to the Board satisfactory assurance of his competency, experience and responsibility.

Each bid is to be accompanied by a certified check for one thousand ($1,000) dollars, payable to the Commonwealth of Massachusetts, such check to be returned to the bidder unless forfeited under the condition herein stipulated. This check should not be enclosed in the sealed envelope containing the bid, but should be delivered to the Secretary of the Board, from whom a proper voucher will be received.

A bond will be required for the faithful performance of the contract, in the sum of Twenty-five Thousand ($25,000) dollars, with sureties satisfactory to the Board.

The person to whom the contract shall be awarded will be required to offer his surety and to execute the contract and furnish the bond within ten (10) days (not including Sundays) from the date of notice that the contract is ready for signature, and in case of failure or neglect so to do, will be deemed to have abandoned it, and the check accompanying the proposal shall be forfeited to the Commonwealth.

The right is reserved to reject any and all bids and to waive any defect or informality at the discretion of the Board.

WOODWARD EMERY,
CHAS. H. HOWLAND,
CLINTON WHITE,
40-2t Harbor and Land Commissioners.

MASONRY BRIDGE.

ESSEX COUNTY, N. J., PARK COMMISSION.

Sealed proposals for the construction of a Masonry Bridge at the intersection of the East Orange Parkway and the line of the Delaware, Lackawanna & Western R. R. at Thompson Street, East Orange, N. J., will be received at the office of this Commission, 500 Broad Street, Newark, N. J., on Tuesday, the twelfth day of October, 1897.

The Commission will be in session from 3.30 to 4 p. m. on that day to receive the proposals, which will not be received at any other time or place.

Bidders will be required to state in their proposals their names and places of residence, and the names of all persons interested with them in the proposal.

The amount of security which will be required for the proper execution of the contract will be Fifteen Thousand Dollars. Such security to be in form satisfactory to this Commission.

Bidders are requested to send Samples of the Stone and Brick on which their Proposal is based to this office with their proposal.

Bidders will state in writing and also in figures all prices for each of the items of the engineer's estimate, which prices are to cover the full performance of the work in accordance with the specifications.

The engineer's estimate of the work to be done and by which the bids will be tested is as follows:

6,500	cubic yards	excavation of earth.
100	" "	excavation of rock.
500	" "	rock faced masonry.
200	" "	broken range masonry.
2,200	" "	concrete backing.
1,200	" "	foundation masonry.
550	" "	brick arch masonry.

These quantities are considered as approximate, and are not to be held as entitling the contractor to any claim for extra time in the completion of the work, or to any claim for damages, if the quantity of work between the points stated should prove to be greater or less than is here estimated, and the Commission expressly reserves the right of increasing or diminishing the said quantities, as in its opinion may be necessary.

The Commission expressly reserves the right to reject any and all bids.

Blank forms of proposal and further information, with copies of this contract and specification, can be had on application to the Secretary of the Commission. 40-1t

The B. & O. Railroad is having built ten express cars for the U. S. Express Company on the B. & O. lines. These cars are to be 60 feet in length, of extra strength and so arranged that they can be used for the transportation of fine horses. They will be fitted up with removable stalls and when not used for horses will be placed in regular service.

CONTENTS OF SUPPLEMENT.

PERSONAL 135
Obituary 135
ENGINEERING SOCIETIES 135
Coming Technical Meetings 135
NEW PUBLICATIONS 136
Trade Publications 136
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 136
Railways 136
Street and Electric Railways 137
Electric Light and Power 138
Bridges 138
Buildings 139
Water-Works 139
Sewerage 140
Garbage Disposal and Street Cleaning 140
Streets and Roads 141
Manufacturing Plants 141
Gas Plants 141
Miscellaneous Contracts 141
Contract Prices 142
INDUSTRIAL NOTES 143

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Naval Constructor J. J. Woodward, U. S. N., has been ordered to duty as Superintendent of Construction at Newport News, Va.

Chief Engineer A. B. Willits, U. S. N., has been ordered to Thurlow, Pa., to succeed Chief Engineer G. S. Willits as Inspector of Steel.

Mr. James Leland Crider, civil engineer, of Martinsburg, W. Va., was married, Oct. 6, to Miss Anna Belle Snodgrass, of that place.

Mr. Herbert Miller McIntosh, city engineer, of Burlington, Vt., was married recently to Miss Nellie Lucretia Tollman, at Saratoga Lake, N. Y.

Mr. D. A. Hitchcock, civil, consulting and inspecting engineer, of Detroit, Mich., has moved his office from 33 Cleland Building, 29 and 31 State St., to 1413 Majestic Building.

Mr. Charles A. Hague, M. Am. Soc. C. E., M. Am. Soc. M. E., of New York city, has resigned as consulting engineer of the York Water Co., York, Pa., and Mr. Henry Berkinbine, of Philadelphia, Pa., has been appointed to succeed him.

Mr. W. D. Kearfott, Ohio Manager for Henry R. Worthington, with office at Cleveland, O., has resigned and has opened an office in the Wade Building, in that city, where he will engage in a general engineering business and as manufacturers' agent for machinery.

Lieutenant Clement A. F. Flagler, Corps of Engineers, U. S. A., has been ordered to Willets Point, N. Y., for duty with the battalion of engineers. Lieutenant Edwin R. Stuart, Corps of Engineers, has also been ordered to Willets Point, for duty at the U. S. Engineer School.

Mr. Alfred Allen Stuart, M. Am. Soc. C. E., Chief Engineer with Mr. Colin McLean, of New York, was married Oct. 6 to Miss Agnes Booth. Mr. Stuart was until recently Chief Engineer of the Wilson & Baillie Mfg. Co., of Brooklyn, N. Y.

Maj. William R. Livermore, Corps of Engineers, U. S. A., has been appointed a member of the Nicaragua Canal Commission, to succeed Capt. Oberlin M. Carter, Corps of Engineers, resigned. Major Livermore is a native of Massachusetts, and was graduated from the U. S. Military Academy, West Point, N. Y., in 1865, being then appointed as First Lieutenant in the Corps of Engineers. He served as Assistant Engineer in the construction of Fort Taylor, Key West, Fla., until July, 1868, except for four months in 1866, when he was with the Engineer Battalion at Willets Point, N. Y. In 1869 he was on the Geodetic Survey of the Northern Lakes, and in 1870 was promoted to Captain and placed in command of the Engineer Company at Willets Point. From 1878 until 1886 he was Chief Engineer of the Department of Texas, and was a member of the Boundary Commission between the Indian Territory and Texas from 1885 to 1887. Since 1887 he has been a member of various engineer boards, among them the board appointed to consider and report upon the subject of constructing "a harbor of refuge" at Point Judith, R. I. He is at present Engineer of the First and Second Light-house Districts.

OBITUARY.

Capt. Peter Hogan, civil engineer, of Ballston Spa, N. Y., died this wook, aged 70.

Gen. Minor T. Thomas, civil engineer, formerly with the St. Paul & Pacific R. R., now a part of the Great Northern system, died at Minneapolis, Minn., Oct. 2, aged 67.

Mr. Zephon Flower Walker, civil engineer and surveyor, of East Athens, Pa., died last week, aged 73. He was formerly in the service of the Lehigh Valley R. R. as a draftsman.

Mr. Peter E. Studebaker, Second Vice-President and Treasurer of the Studebaker Bros. Mfg. Co., wagon-makers, of South Bend, Ind., died at Alma, Mich., Oct. 9, aged 61.

Mr. J. J. Philbrick, President of the Key West Gas & Electric Light Co., Key West, Fla., died recently, aged 57. He was born in Keene, N. H., and went to Key West as Paymaster at the United States Naval Station.

Mr. Howard L. Edson, Assistant Engineer in the Engineering Department, of Boston, Mass., died Oct. 8, aged 26. He was born in Weymouth, Mass., and graduated from Tuft's College, College Hill, Mass., in 1891.

Mr. Lemuel Ammerman, President of the Lackawanna Valley Traction Co., and the Blossburg Water Co., died at Blossburg, Pa., Oct. 8, aged 51. He was also Vice-President of the Spring Brook Water Supply Co., Wilkes-Barre, Pa., the Scranton & Pittston Traction Co., the Brookside Coal Co., and the Mansfield Water Co. He was a member of the Fifty-second Congress, and was Controller of Scranton in 1887.

Mr. William Augustus Stiles, Park Commissioner, of New York city, and Editor of "Garden and Forest," died Oct. 6, in Jersey City, N. J. He was born near Deckertown, N. J., Mar. 9, 1837, and graduated in 1859 from Yale College, New Haven, Conn. Soon afterwards he visited California for his health and accepted an instructorship in a private seminary, but soon resigned to enter the service of the Union Pacific Ry., in its engineering corps. While engaged in this work he overstrained his weak eyesight and was compelled to give up his work, returning to his home by way of Panama. When he reached Deckertown he was entirely blind and was an invalid for more than a year. During his illness he devoted much time to the study of botany and horticulture and had soon become an expert in these subjects. In 1888 he was selected as the Editor of "Garden and Forest," at the time that journal was established, and the standard it attained was largely due to Mr. Stiles' ability and judgment. Mr. Stiles was also Editor of the agricultural department of the Philadelphia "Press" and was a frequent contributor to various magazines and journals of articles on botany, literature and music.

Mr. George E. Mann, M.Am. Soc. C. E., Chief Engineer of the Grade Crossing Commission, of Buffalo, N. Y., died Oct. 3. He was born in that city in 1844 and graduated from Dartmouth College, Hanover, N. H., in 1866, as a civil engineer. Shortly after his graduation he entered the engineering department of the Lake Shore R. R. and assisted in the construction of the stone arch culverts between Buffalo and Erie. In 1868 he went to California and entered the Department of Bridges and Buildings of the Central Pacific R. R. The following year he was transferred to the Western Pacific and placed in charge of the tunnel work through the Diabalo Mountains. He returned to Buffalo upon the completion of this work and was Division Engineer on the Buffalo & Southwestern R. R. until 1873, when he was elected City Engineer of Buffalo, serving until Jan. 1, 1878. At the latter date he was appointed Chief Engineer and General Superintendent of the Buffalo & Rock City Pipe Line Co., and Superintendent of the Atlas Oil Works, until the time that the plant was sold to the Standard Oil Co. In 1888 he was re-elected City Engineer, retaining the position until 1893 when he resigned and was made Chief Engineer of the Grade Crossings Commission, into which his position had been merged.

Mr. William Barnes Bennet, the retired head of the firm of Bennet, Miles & Co., manufacturers of machine tools, of Philadelphia, Pa., died suddenly Oct. 6, at his home in that city. He was born in Bradford, N. H., May 10, 1817, and in 1834 apprenticed himself to Moore & Colby, of Petersboro, N. H., manufacturers of cotton and woolen machinery. In three years he had become Superintendent of the works and very shortly took the place in the firm of a partner who withdrew. In 1840 he entered the service of the Amoskeag Machine Works, Manchester, N. H., and two years later was induced to take charge of a manufactory of woolen machinery in Mishawaka, Ind., but the latter works burning down while he had returned to the East for his family, he found himself upon his return to Mishawaka homeless and without employment. He went to work as a blacksmith and gunsmith, and soon afterwards his inventions having gained him notice he was made Superintendent of the shops of the St. Joseph Iron Co. In 1847 he returned to New England and undertook contracts to build cotton and woolen machinery for the Lowell Machine Shops, Lowell, Mass., and ultimately assumed management of the pattern and designing departments. In 1851 he went to Philadelphia, and with his nephew, Mr. G. A. Colby and Mr. E. D. Marshall, established the Industrial Works. In 1855, upon their consolidation with the Frederick B. Miles Machine Works, the firm became Bennet, Miles & Co. The business has continued to grow until at present 450 hands are employed and castings weighing 19 tons have been made. In 1888 Mr. Bennet resigned the management to his sons and retired from active business. He was a Director of the American Academy of Fine Arts and of the Academy of Design for Women.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

CHICAGO ELECTRICAL ASSOCIATION.
Oct. 15. "Evolution of the Isolated Electric Plant," Harold Almert. Secy., J. R. Cravath, 825 Monadnock Bldg.

ENGINEERS' CLUB OF COLUMBUS.
Oct. 16. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.

ENGINEERS' CLUB OF PHILADELPHIA.
Oct. 16. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' CLUB OF MINNEAPOLIS.
Oct. 18. Secy., Elbert Nexsen, 1620 S. E. 4th St., Minneapolis, Minn.

TECHNICAL CLUB OF OMAHA.
Oct. 18. Secy., J. Harry Lawrie, Omaha, Neb.

WESTERN FOUNDRYMEN'S ASSOCIATION.
Oct. 18-20. Autumn meeting, Cincinnati, O. Secy., A. Sorge, Jr., 1020 Monadnock Block, Chicago, Ill.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Oct. 19. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 19. Annual convention, at the Brown Palace Hotel, Denver, Colo. Secy., S. F. Patterson, B. & M. R. R., Concord, N. H.

AMERICAN STREET RAILWAY ASSOCIATION.
Oct. 19, 22. Annual convention at Niagara Falls, N. Y. Secy., T. C. Penington, Chicago.

COLUMBIAN ENGINEERING SOCIETY.
Oct. 19. Secy., F. W. Hart, 15th and H Sts., N. W., Washington, D. C.

WESTERN RAILWAY CLUB.
Oct. 19. "Washing Out Locomotive Boilers," John Mackenzie; "Steam Heat for Passenger Cars," Wm. Garstang. Secy., F. M. Whyte, 225 Dearborn St., Chicago.

BOSTON SOCIETY OF CIVIL ENGINEERS.
Oct. 20. Secy., S. E. Tinkham, City Hall, Boston, Mass.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Oct. 20. Frank H. Olmated, Los Angeles, Cal.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Oct. 20. Secy., C. W. Hunt, 127 E. 23d St., New York city.

ENGINEERS' CLUB OF ST. LOUIS.
Oct. 20. Secy., Richard McCulloch, St. Louis, Mo.

AMERICAN GAS LIGHT ASSOCIATION.
Oct. 20—22. Annual Convention at Old Point Comfort, Va. Secy., Alfred E. Forstall, Montclair, N. J.

ENGINEERS' CLUB OF CINCINNATI.
Oct. 21. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

NEW YORK RAILROAD CLUB.
Oct. 21. Secy., W. W. Wheatly, 168 Montague St., Brooklyn, N. Y.

WISCONSIN POLYTECHNIC SOCIETY.
Oct. 26. Secy., W. K. Means, Loan & Trust Bldg., Milwaukee, Wis.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
Oct. 27. Secy., R. W. Pope, 26 Cortlandt St., New York City.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Oct. 28. Secy., C. H. McLeod, 112 Mansfield St., Montreal, Ont.

ENGINEERING ASSOCIATION OF THE SOUTH.
Oct. 28. Secy., L. P. Brown, Nashville, Tenn.

THE JOHNSTOWN ENGINEERING SOCIETY.—The second session of this society was held Oct. 6 in Johnstown, Pa., at which Mr. E. Wise, electrician for the Cambria Iron Co., read a paper on "Electricity."

WESTERN SOCIETY OF ENGINEERS.—At the meeting on Oct. 6 the evening was devoted to a general discussion on the points of engineering interest visited during the recent trip to the East, described in our issue of Sept. 30, a somewhat full description being given of the great plant of the Bethlehem Iron Works.

MONTANA SOCIETY OF ENGINEERS.—At the meeting on Sept. 11 the subjects discussed were mining operations, tunnel rights, and the action of mineral in the water of mines upon the pumps and pipes. Mr. Goodale stated that after a considerable amount of experimenting he has succeeded in partially obviating the difficulty by treating the water before entering the pipes.

A. S. Hovey, Secy.

MICHIGAN ENGINEERING SOCIETY.—The annual meeting of the Board of Directors of this society was held at Lansing, Mich., Sept. 15. A by-law relative to honorary membership was prepared and approved by the directors. It was decided to invite the members of the Ontario Land Surveyors' Association to meet with us at Port Huron. Every effort will be made to provide an attractive and instructive programme. F. Hodgman, Secy.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.—At the meeting on Oct. 4 a paper was presented by Henry Vier, entitled "A Description of that part of the Grade Crossing Improvement Work recently completed by the New York Central & Hudson River R. R. Co."

Suitable resolutions were passed in respect to the memory of Mr. Geo. E. Mann, the society's first president, whose death occurred Oct. 2, 1897. Henry Vier, Secy.

BROOKLYN ENGINEERS' CLUB.—The regular meeting of this club was held Oct. 7 at the Clarendon Hotel. Owing to the absence of the president, Mr. A. J. Caldwell, the meeting was called to order by the vice-president, Mr. Walter M. Meserole. The usual regular business was transacted, after which Mr. J. C. Meem, assistant engineer in the Department of City Works, read a paper entitled "A Study of a Proposed Method for Building a Submerged Tunnel."

CHICAGO ELECTRICAL ASSOCIATION.—The following papers are on the program for the present season:

Oct. 15: "Evolution of the Isolated Electric Plant," Harold Almert.

Nov. 5: "The Safe Current Capacity of Electrical Conductors," C. H. Sewall.

Nov. 19: "Daily Mathematical Conveniences," S. G. McMeen.

Dec. 3: "Heavy Electric Traction," Cloyd Marshall

Dec. 17: "Electricity in Shipbuilding," C. C. Mattison.

Jan. 7: "Electrical Shop Transmission," H. G. Dimmick.

Jan. 21: "The Art of Constructing Telephone Apparatus," Henry P. Clausen. J. R. Cravath, Secy.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.—A meeting of this society was held Oct. 4. Mr. C. A. Alderman read a paper on the Chippewa Valley Electric Ry., an up to date system of about 22 miles nearly completed. Power is to be furnished for 20 years at $6 per HP. Mr. Alderman also described the late trip of the Western Society of Engineers to Niagara.

Mr. Loweth exhibited the results of some paint tests—twenty odd samples of black and more or less rust roughened plates of sheet iron which had undergone six months' exposure to locomotive smoke while suspended from the roof of the Union Depot train shed about 50 ft. above the tracks. The iron plates, new and bright, had each received one coat of paint and had been subjected to equal

exposure. The red lead sample gave the best results; next came the white lead, followed by the iron oxides and an asphaltum, which were generally in much better condition than the graphites. An anti-rust specimen was the brownest spectacle of the lot. C. L. Annan, Secy.

SOCIETY FOR THE IMPROVEMENT OF WESTERN WATERWAYS.—The convention of this society was opened Oct. 5 in the Grand Opera House, Davenport, Iowa. In all about 150 delegates were present, representing Arkansas, Louisiana, Minnesota, Missouri and Pennsylvania.

In the absence of Governor Drake, Captain Bryson read his address. Mr. C. A. Fieke read a paper on "Waterways; Natural and Artificial."

Regular committees were appointed and all resolutions referred to the proper committee without reading. Permanent officers were selected as follows: Chairman, J. C. Catchings, Mississippi; Secretary, Charles Francis, Iowa. After the address by the new chairman the delegates adjourned to a banquet.

ENGINEERS' CLUB OF ST. LOUIS.—The 458th regular meeting of this club was held Oct. 6.

A letter was read from Mr. F. B. Maltby, Assistant U. S. Engineer in charge of the government works on the Osage River, inviting the club to visit the new dam now being built near Osage City. It was voted to accept the invitation.

A paper by Mr. A. L. McRae on "The Electrolysis of Caustic Soda" was read. The paper described a process of manufacturing caustic soda from common salt by electrolytic methods, with some figures as to the cost of manufacture. This process has been used in England and Germany, but is not in use in this country.

Following this paper Mr. M. L. Holman exhibited a number of lantern slides showing types of water-works engines and sewage pumps. Richard McCulloch, Secy.

NEW PUBLICATIONS.

BROWN'S DISCIPLINE OF RAILWAY EMPLOYEES.—The Railway Discipline Pub. Co., Easton, Pa. Paper; 7½ × 4½ ins.; pp. 77; 17 cts.

This pamphlet contains two articles by Mr. G. R. Brown, the originator of the well-known system of discipline without suspension, which has been quite extensively adopted by American railways, and also a large number of letters from railway managers giving their experience in the application and operation of the system. For any one interested in the subject the pamphlet will prove very interesting reading.

CAR LIGHTING.—National Electric Car Lighting Co., New York, N. Y. Cloth; 3½ × 5½ ins.; pp. 14; illustrated.

This pamphlet describes in some detail the construction and operation of the system of electric car lighting controlled by the company named above. The system consists of a generator operated by a belt from the car axle, a switch-board and batteries for receiving and storing the current from the generator. Complete rules and instructions are given for operating, inspecting and repairing the machinery and instruments.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

ELECTRIC MOTOR VEHICLES.—American Electric Vehicle Co., Chicago. Paper; 7½ × 5¼ ins.; pp. 16.

This is an illustrated pamphlet descriptive of the different kinds of storage-battery vehicles designed and built by this company, including a delivery wagon now in use by a Chicago silk merchant.

WIND ENGINES, PUMPS AND TANKS.—U. S. Wind Engine & Pump Co., Batavia, Ill. Paper; 7 × 10¼ ins.; pp. 48.

This is an illustrated catalogue of the various specialties manufactured by this company, including water supply tanks, wind engines, steam and gas engines and electric motors for pumping machinery, pipe fittings, etc. Some of the water towers have been illustrated in our columns. Two tables are given of the capacities of the Halladay windmills.

WIRE IN ELECTRICAL CONSTRUCTION.—John A. Roebling's Sons Co., Trenton, N. J. Cloth; 7 × 4⅝ ins.; pp. 74.

By rights this should not be considered a trade publication, for it is in all respects an excellent hand-book. It includes tables of measures, tables of copper wire, iron wire, flow of currents, spans, descriptions of various sorts of wires and cables for lighting or power purposes. Between its covers will be found more useful information than is contained in the average electrical hand-book.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Oct. 14.	Brick culvert	Cleveland, O.	Oct. 7
Oct. 14.	Paving	New York, N. Y.	Oct. 7
Oct. 14.	Asphalt paving	New York, N. Y.	Oct. 7
Oct. 14.	Flagging, paving, etc.	New York, N. Y.	Oct. 7
Oct. 14.	Brick paving, etc.	Cleveland, O.	Oct. 7
Oct. 14.	Railway grading (10 miles)	Nampa, Ida.	Oct. 7
Oct. 14.	Plumbing	Central Islip (L.I.), N. Y.	Oct. 7
Oct. 14.	Electrical work	Ward's Island, N. Y. H.	Oct. 7
Oct. 14.	Excavating	Jersey City, N. J.	Sept. 30
Oct. 14.	Replating hull of snag boat	Cincinnati, O.	Aug. 26
Oct. 14.	Clock tower	Detroit, Mich.	Sept. 23
	Advertised, Eng. News, Sept. 23 and 30.		
Oct. 14.	Pier	New York, N. Y.	Oct. 14
Oct. 14.	Brick and pipe sewers	Jersey City, N. J.	Oct. 14
Oct. 14.	Pipe sewers	Murphysboro, Ill.	Oct. 14
Oct. 14.	Paving, etc.	Jersey City, N. J.	Oct. 14
Oct. 15.	Garbage crematory	Reading, Pa.	Oct. 14
Oct. 15.	School building	Washington, D. C.	Oct. 14
Oct. 15.	Asphalt paving, etc.	Brooklyn, N. Y.	Oct. 14
Oct. 15.	Paving, etc.	Wilmette, Ill.	Oct. 14
Oct. 15.	Laying water pipe	Boston, Mass.	Oct. 14
Oct. 15.	Water-works bonds ($15,000)	Caldwell, O.	Oct. 14
Oct. 15.	Bridge	Mountain Home, Ida.	Sept. 30
Oct. 15.	Pipe sewers (36,713 ft.)	Jacksonville, Fla.	Sept. 30
Oct. 15.	Brick and iron pipe sewers	Jacksonville	Sept. 30
Oct. 15.	Heating and ventilation	Ashland, O.	Sept. 30
Oct. 15.	Sewers	Omaha, Neb.	Oct. 7
Oct. 15.	Bridge	Rochester, N. Y.	Oct. 7
Oct. 15.	Street improvement bonds	Braddock, Pa.	Oct. 7
Oct. 15.	Paving, etc.	Omaha, Neb.	Oct. 7
Oct. 16.	School buildings (2)	Jersey City, N. J.	Oct. 7
Oct. 16.	Reservoir	Haverhill, Mass.	Oct. 7
	Advertised, Engineering News, Oct. 7.		
Oct. 16.	Sewers	Elkhart, Ind.	Oct. 7
Oct. 16.	Brick pvg (7,900 sq.yds.), etc.	Newton, Ia.	Sept. 30
Oct. 16.	Boilers	Cleveland, O.	Sept. 30
Oct. 16.	Grading, etc.	Lakewood, O.	Oct. 14
Oct. 16.	Sewer	Sandusky, O.	Oct. 14
Oct. 16.	Grading	Kansas City, Mo.	Oct. 14
Oct. 17.	Steel bridge	Towanda, Pa.	Oct. 7
Oct. 18.	Paving, etc.	Jersey City, N. J.	Oct. 14
Oct. 18.	Cement walks	Newport, Ind.	Oct. 14
Oct. 18.	Laying water pipe	Jersey City, N. J.	Oct. 14
Oct. 18.	Gun forgings (30 sets)	Washington, D. C.	Oct. 14
Oct. 18.	Electric lighting	Los Angeles, Cal.	Oct. 14
Oct. 18.	Macadamizing	Brooklyn, N. Y.	Oct. 14
Oct. 18.	Armory building	Brooklyn, N. Y.	Oct. 14
Oct. 18.	Building	New York, N. Y.	Oct. 14
Oct. 18.	Repairing steamer	New York, N. Y.	Oct. 7
Oct. 18.	Sewer bonds ($12,508)	Ann Arbor, Mich.	Oct. 7
Oct. 18.	Parkway, etc.	Medford, Mass.	Oct. 7
Oct. 18.	Grading	San Mateo, Cal.	Oct. 7
Oct. 18.	Armory alterations	New York, N. Y.	Oct. 7
Oct. 18.	Electric l't plant	Southampton, England	Oct. 7
Oct. 18.	Sewers	Norristown, Pa.	Sept. 30
Oct. 18.	Pipe sewer	Irvington, Ind.	Sept. 30
Oct. 18.	Sewer	Wahpeton, N. Dak.	Sept. 30
Oct. 18.	Heating and ventilating	Racine, Wis.	Sept. 30
	Advertised, Eng. News, Sept. 30 and Oct. 7.		
Oct. 18.	Additional water supply	Lebanon, Pa.	Sept. 30
	Advertised, Engineering News, Sept. 30.		
Oct. 18.	Scow and boat	Sabine Pass, Tex.	Aug. 26
Oct. 18.	Macadamizing, wall, etc.	Passaic, N. J.	Oct. 14
Oct. 19.	Hauling, etc., sewer pipe	Jacksonville, Fla.	Oct. 7
Oct. 19.	Water pipe (6,000 ft.)	Jacksonville, Fla.	Oct. 7
Oct. 19.	Macadamizing	Columbus, O.	Oct. 7
Oct. 19.	Highway bonds ($40,000)	Mt. Vernon, N. Y.	Oct. 14
Oct. 19.	Sewers	Brooklyn, N. Y.	Oct. 14
Oct. 20.	Electric light plant	Pittsburg, Pa.	Oct. 14
Oct. 20.	Fire department bldg.	New York, N. Y.	Oct. 14
Oct. 20.	Heating, ventilating, etc.	Salt Lake City, Utah	Oct. 14
Oct. 20.	Cement walks	Riverton, N. J.	Oct. 14
Oct. 20.	Grading, etc.	Chicago, Ill.	Oct. 14
Oct. 20.	Electric light plant	Coraopolis, Pa.	Oct. 14
Oct. 20.	Retaining wall	Evansville, Ind.	Oct. 7
Oct. 20.	Water well (8-in.)	Richmond, Va.	Sept. 16
Oct. 21.	Steel steam cutter	Washington, D. C.	Sept. 23
Oct. 21.	Iron bridge	Toms River, N. J.	Sept. 23
Oct. 21.	Water mains	New York, N. Y.	Oct. 7
Oct. 21.	Public bath-house	New York, N. Y.	Oct. 7
Oct. 21.	Iron bridge	Lancaster, Pa.	Oct. 14
Oct. 21.	Repairing wall	Buffalo, N. Y.	Oct. 14
Oct. 21.	Lift bridge	Fort Plain, N. Y.	Oct. 14
Oct. 21.	Electric lighting	Nevada City, Cal.	Oct. 14
Oct. 21.	Bridge approach	Boston, Mass.	Oct. 14
	Advertised, Engineering News, Oct. 14.		
Oct. 21.	Paving, etc.	New Haven, Conn.	Oct. 14
Oct. 21.	Check valve (36-in.)	Cleveland, O.	Oct. 14
Oct. 22.	Arc lighting (4 wards)	Philadelphia, Pa.	Oct. 14
Oct. 22.	Graveling, etc.	Rockville, Ind.	Oct. 14
Oct. 22.	Water-works	Statesville, N. C.	Oct. 14
Oct. 22.	Grading	St. Louis, Mo.	Oct. 14
Oct. 22.	Revetment work	St. Louis, Mo.	Oct. 14
Oct. 22.	Bridge repair bonds	Cleveland, O.	Sept. 30
Oct. 23.	School building	Toledo, O.	Sept. 30
Oct. 23.	Sewers	Washington, D. C.	Sept. 30
	Advertised, Engineering News, Sept. 30.		
Oct. 23.	County road work	Cincinnati, O.	Oct. 7
Oct. 23.	Paving, curbing, etc.	Cleveland, O.	Oct. 7
Oct. 23.	Hospital building	Santa Cruz, Cal.	Oct. 7
Oct. 23.	Court house repairs	Cincinnati, O.	Oct. 7
Oct. 23.	Electric light plant	Perrysburg, O.	Oct. 14
Oct. 23.	Iron foot-bridge	Tiffin, O.	Oct. 14
Oct. 25.	Macadamizing	Windham, Conn.	Oct. 14
Oct. 25.	Paving	Toledo, O.	Oct. 14
Oct. 25.	Brick and pipe sewers	Toledo, O.	Oct. 14
Oct. 25.	Sewer	Irvington, Ind.	Oct. 14
Oct. 25.	Iron bridges (3)	Huntington, W. Va.	Oct. 7
Oct. 25.	Historical building	Des Moines, Ia.	Oct. 7
Oct. 25.	School buildings	Tower, Minn.	Oct. 7
Oct. 25.	Breakwater	Duck Island, Conn.	Oct. 7
Oct. 26.	Locks (4)	Cincinnati, O.	Sept. 30
	Advertised, Eng. News, Sept. 30 to Oct. 21.		
Oct. 26.	Ambulance station	New York, N. Y.	Oct. 14
Oct. 26.	Pipe sewers	Steubenville, O.	Oct. 14
Oct. 26.	Lowering water intake, etc.	Pana, Ill.	Oct. 14
Oct. 26.	Bridge approaches	Columbus, O.	Oct. 14
Oct. 27.	Steam heating	Saginaw, Mich.	Oct. 14
Oct. 27.	Aqueduct (9 mls.)	Birmingham, England	Oct. 14
Oct. 27.	Dam and reservoir	Westfield, Mass.	Sept. 30
	Advertised, Engineering News, Sept. 30.		
Oct. 27.	Bridge superstructure	Winnipeg, Man.	Sept. 30
Oct. 27.	Ch'n'l and revetment wrk	James River, Va.	Sept. 30
	Advertised, Eng. News, Sept. 30 to Oct. 21.		
Oct. 28.	Pier, sea wall, etc.	Boston, Mass.	Oct. 7
	Advertised, Eng. News, Oct. 7 and 14.		
Oct. 28.	Sewer	Cleveland, O.	Oct. 14
Oct. 28.	Subway (Sec. 11)	Boston, Mass.	Oct. 14
	Advertised, Eng. News, Oct. 14 and 21.		
Oct. 29.	Steam heating	Fort Hamilton, N. Y. H.	Oct. 7
Oct. 30.	Lock and dam	Monongahela River, W. Va.	Sept. 23
	Advertised, Eng. News, Sept. 23 to Oct. 14.		
Oct. 30.	Plans for sewer system	Uxbridge, Eng.	Sept. 16
Oct. 30.	Electric light plant	Waterloo, Ill.	Oct. 14
Oct. 30.	Swing bridge	West Carrollton, O.	Oct. 14
Oct. 30.	Paving	Sandusky, O.	Oct. 14
Oct. 31.	Utilization of water	Madras, India	Sept. 30
Nov. 1.	Electric l't'g contract	Niagara Falls, N. Y.	Sept. 30
Nov. 1.	Removing wreck	Christiana River, Del.	Oct. 7
	Advertised, Eng. News, Oct. 7 to 28.		
Nov. 1.	Reservoir, pipe, etc.	Lancaster, O.	Oct. 7
Nov. 1.	Pipe sewers (1,800 ft.)	Elizabeth, N. J.	Oct. 14
Nov. 1.	Sidewalks	Cincinnati, O.	Oct. 14
Nov. 1.	Aluminum lanterns (25)	Washington, D. C.	Oct. 14
Nov. 1.	Arc lights (29)	Orangeville, Ont.	Oct. 14
Nov. 1.	Brick and pipe sewers	Toledo, O.	Oct. 14
Nov. 1.	Water bonds ($4,500)	Meredith, N. H.	Oct. 7
Nov. 1.	Officers' quarters	Port Royal, S. C.	Oct. 14
Nov. 1.	Pile bridges (3)	Cromwell, Minn.	Oct. 14
Nov. 3.	Steel tank trestle	Ft. Assiniboine, Mont.	Oct. 14
Nov. 3.	Bridge substructures (2)	Chicago Ill.	Sept. 9
	Advertised, Eng. News, Sept. 30 to Oct. 21.		
Nov. 3.	Brick paving (1,750 sq.yds.)	Frankfort, Ind.	Oct. 14
Nov. 3.	Bridge superstructures (2)	Chicago, Ill.	Sept. 9
	Advertised, Eng. News, Sept. 30 to Oct. 21.		
Nov. 5.	Electrical equipment	Hull, England	Sept. 16
Nov. 6.	Purchase of water-works	DeKalb, Ill.	Sept. 9
Nov. 6.	Grading, etc.	Springfield, O.	Oct. 14
Nov. 6.	Repairing dome	Topeka, Kan.	Oct. 14
Nov. 6.	Officers' quarters	Detroit, Mich.	Oct. 14
Nov. 8.	Brick sewer (60-in.)	Toledo, O.	Oct. 14
Nov. 9.	Pipe sewers	St. Helena, Cal.	Oct. 14
Nov. 9.	Sewers (11,000 ft.)	St. Joseph, Mich.	Oct. 14
	Advertised, Engineering News, Oct. 14.		
Nov. 10.	Weir dam	Chicago, Ill.	Oct. 7
	Advertised, Eng. News, Oct. 7 to 28.		
Nov. 10.	Tail race	Chicago, Ill.	Oct. 7
	Advertised, Eng. News, Oct. 7 to 28.		
Nov. 15.	Sewer system (40 miles)	Savannah, Ga.	Oct. 14
	Advertised, Eng. News, Oct. 14 to Nov. 11.		
Nov. 18.	Water-works (purchase of)	Para, Brazil	Aug. 12
No. 20.	Gas franchise	Palo Alto, Cal.	Oct. 14
Nov. 30.	Street lighting	Singapore, Asia	Oct. 14
Nov. 30.	Plans for public building	Mexico, Mex.	Oct. 7
Dec. 4.	Plans for town hall	Cardiff, Wales	Sept. 16
Dec. 7.	Water franchise	Craiova, Roumania	Oct. 7
Dec. 13.	Electric light franchise	Somerset, Ky.	Oct. 7
	Advertised, Eng. News, Oct. 7 to 21.		
No date.	Asphalt paving	Buenos Ayres, Arg. Rep.	Oct. 14
"	Excavation, etc.	Gloversville, N. Y.	Oct. 14
	Advertised, Engineering News, Oct. 14.		

RAILWAYS.

BREWTON & PINEORA.—We are informed that Col. A. F. Daly and the Central of Georgia Ry. Co., who bought this Georgia railway several months ago, are completing it as it was originally planned, and are also building two extensions. Thirty-seven miles of rails are already laid and a 40-mile gap between the present terminus and Stillmore, Ga., will soon be constructed. After this extension is completed it is expected to extend the line to Pineora, 29 miles west of Savannah, Ga. Another extension to McIntyre from Stillmore is also contemplated. The necessary steel rails for the new railway have yet to be purchased.

CINCINNATI, PORTSMOUTH & VIRGINIA.—It is reported that this company will build a line from Ripley to Winchester, O., the latter town being on the proposed route of the Knoxville, Ohio River & Columbus part of the Black Diamond System projected by Albert E. Boone, of Zanesville, O., and others. Samuel Hunt, Pres. and Gen. Mgr., Cincinnati, O., informs us that his company is perfectly solvent and is engaged in no enterprise which it does not expect to carry through.

DELAWARE, LACKAWANNA & WESTERN.—Press reports state that efforts are being made by this company to secure the control of the Easton & Quakertown Ry., and to continue the line now in process of construction between Quakertown and Riegelsville to Easton, Pa., thus providing for this railway a route to Philadelphia, Pa. J. Archibald, Ch. Engr., Scranton, Pa.

GREAT NORTHERN.—Reports state that this company is establishing new freight yards at St. Anthony Park, Minneapolis, Minn., and that about 20,000 cu. yds. of filling and 6 miles of track-laying will have to be done. John F. Stevens, Ch. Engr., St. Paul, Minn.

MOBILE & OHIO.—H. S. Jones, Columbus, Miss., informs us that track laying on the Montgomery division of the Mobile & Ohio R. R. will be resumed Oct. 5 at the Mississippi state line, and will continue without delay to the Warrior River at Tuscaloosa, Ala. H. B. Farrar, Ch. Engr., Jackson, Tenn.

MUSCATINE, NORTH & SOUTH.—Reports state that Stewart & Ragland have been awarded the contract for constructing the extension of this line from Muscatine to a point on the Iowa Central Ry.; construction work to begin by Nov. 1.

NASHVILLE & KNOXVILLE.—Surveys have been begun for the proposed extension of this railway from Lebanon, its present terminus, to Nashville, Tenn., a distance of 75 miles. The new line will be parallel to the Nashville, Chattanooga & St. Louis Ry. R. S. Moscrip, Ch. Engr., Cookeville, Tenn.; A. J. Crawford, Pres. and Gen. Mgr., Terre Haute, Ind.

OAK HILL & MOOSIC.—This company was incorporated in Pennsylvania Oct. 5, with a capital stock of $2,000. It is proposed to build one mile of railway from Moosic to Oak Hill, Pa., thereby connecting the Delaware & Hudson and the Erie & Wyoming Valley R. R. The directors are: D. K. Oakley, Pres.; J. L. Rea, F. S. Pauli, R. Ireland, and J. W. Browning, all of Scranton, Pa.

OHIO RIVER & CHARLESTON.—It is reported that this line will be extended from Gaffney to Pacolet and Spartanburg, S. C. A. Trippe, Gen. Supt., Blacksburg, S. C.

PENNSYLVANIA.—Press reports state that surveys are being made for a route starting at the western terminus of the Pennsylvania R. R. bridge in Reading, through Oakbrook, Berks county, and thence to Adamstown and New Holland, Lancaster county, connecting with the main line of the Pennsylvania at Lancaster, Pa. The entire length of the new branch will be about 40 miles, and traffic will be carried on over this route from Harrisburg and other points to Reading instead of running to Frazer or Philadelphia, as is now done. W. H. Brown, Ch. Engr., Philadelphia, Pa.

PITTSBURG & EASTERN.—This railway company is extending its line 26 miles westward from Mahaffey, Pa. Surveys have also been made and most of the right of way acquired for an extension of the line from Saltsburg to the Youghiogheny River. J. C. Patterson, Ch. Engr., Mahaffey, Pa.

PONTIAC, OXFORD & NORTHERN.—H. E. Riggs, of Toledo, O., has been engaged by this company to complete the surveys of their line and to complete records of all lands and permanent structures erected.

PRESCOTT & EASTERN.—This company has been incorporated in Arizona by officials of the Santa Fe, Prescott & Phoenix Ry. Co. to build a railway from a point five miles north of Prescott on the Santa Fe, Prescott & Phoenix to Mayer and the O'Neill onyx quarries, about 30 miles distant. The incorporators are: D. M. Perry, C. C. Bowen, Simon J. Murphy, of Detroit, Mich.; N. K. Fairbank, Jay Morton, G. W. Kretzinger, Chicago, Ill.; F. M. Murphy, Prescott, Ariz.

SAN JACINTO, LAKE VIEW & NORTHERN.—Reports state that this railway, which is a branch of the Santa Fe Pacific R. R., will be constructed at once. The road will extend from San Jacinto to Lake View, Cal., a distance of about 10 miles. R. B. Burns, Ch. Engr., Santa Fe Pacific R. R., Williams, Ariz.

SHREVEPORT CENTER & GULF.—E. L. Parker, Center, Tex., informs us that surveys have been made for this projected railway, but that the location is not yet complete; partial right of way has also been obtained. When completed the line will extend from Center to Brooklyn, Tex., a distance of 16 miles. Contracts will probably be let in two weeks. Pres., W. J. Lester, Center, Tex.; Ch. Engr., C. W. Polk, Houston, Tex.

TENNESSEE.—The Social Democracy of America, of which Eugene V. Debs is the leading member, contemplates the construction of a railway 75 miles long from Nashville to Lebanon, Tenn. It is proposed to build and operate the new line by labor furnished by this society, and after completing the work to turn it over to the City of Nashville for a nominal consideration.

TOLUCA & EASTERN.—Press reports state that work will begin in a few days on this railway, which will run from Rutland to Varna, via Toluca, Ill., meeting the Illinois Central, the Santa Fe, and the Chicago & Alton. The prime object of the road is an outlet for Toluca coal. It is said that Chicago capitalists are back of the enterprise, and that the line will be in operation by Dec. 1.

VENEZUELA.—Consular reports announce that a new railway has been constructed between the seaport La Vela and Coro by the Coro & La Vela R. R. & Improvement Co., and that the line will shortly be opened for use. The contract of Dec., 1894, provided that the line be opened for traffic by Oct. 20, 1897, and the enterprise has been so successfully carried out that a proposal to extend the line as far as Maracaibo is being seriously considered. All the capital necessary for the building of such a railway is already in the hands of the promoters, so that the work of construction will probably begin soon.

VINCENNES & NEW ALBANY.—George E. Greene, Mayor of Vincennes, Ind., informs us that the first stake of this line will be driven at Vincennes on Oct. 12, and that the projectors state that the capital for construction has been practically secured. This is a 125-mile branch of the projected Black Diamond System, which comprises 1,397 miles and extends from Savannah, Ga., to Springfield, Ill. William Kirkby, Pres., Toledo, O.

WESTERN NEW YORK & PENNSYLVANIA.—Reports state that this railway company intends to construct a broad gage line from Riverside to Bradford, N. Y., via the Tuna Valley. R. D. McCreary, Ch. Engr., Buffalo, N. Y.

WEST JERSEY & SEA SHORE.—The directors of this company have decided to double-track the Camden & Atlantic division from Camden to Atlantic City, N. J. A heavier rail will be laid so as to permit the running of heavier and new-class locomotives. J. H. Nichol, Asst. Engr., Camden, N. J.

STREET AND ELECTRIC RAILWAYS.

EXETER, N. H.—The Exeter St. Ry. Co. will build a three-mile loop line about this village during this fall. Wallace D. Lovell is the controlling owner. C. A. Cotton, Supt.; R. D. Hood, Engr.

BARRE, VT.—The city council has passed a resolution ordering the electric railway company in this city to remove its tracks and pay the $3,000 forfeiture on account of it not having completed the road before the time limit, Sept. 1. John J. Flynn is one of the projectors.

DEDHAM, MASS.—It is reported that the Norfolk Western St. Ry. Co. will soon petition the selectmen of this town for a franchise to build and operate an electric railway from the Westwood line to Memorial Hall Sq., via High St.

HANOVER, MASS.—Wm. J. Coughlan, Abington, writes us that the Hanover St. Ry. Co. has decided to build an extension of its track from Assinippi to Norwell Centre, three miles. The work will probably be done this fall.

MANSFIELD, MASS.—The surveys for track location of the Norfolk Southern St. Ry., which is to be built from Norwood through Walpole and Foxboro to this place, have been begun by the the engineers, Hodges & Harrington, Boston. Edw. F. Draper, Treas., 914 Exchange Bldg., Boston.

NORTH ADAMS, MASS.—The Hoosac Valley St. R. R. Co. has begun to erect a 102 x 130-ft. car barn of brick and iron. Two 300 HP. engines and two 300 HP. General Electric dynamos have been installed in the power house at Zylonite.

NORTHAMPTON, MASS.—The Northampton & Amherst Electric Ry. Co. has been formed to construct an electric railway from this town to Amherst, with capital stock of $150,000; one half paid up. E. C. & E. E. Davis, Engrs.

WAKEFIELD, MASS.—Chas. F. Woodward, Pres., writes us that construction of the Salem & Wakefield St. Ry. will commence in a few days. The motive power will be electricity, and the road will be six miles in length, running through Saugus, Lynnfield and Peabody to Salem. Jos. A. Bancroft, Reading, Ch. Engr.

BINGHAMTON, N. Y.—The Binghamton & Otselic Valley R. R. Co. will build an electric line, 60 miles, in length, through Georgetown, Otselic, Pitcher, Taylor, Cincinnatus and Willett.

BUFFALO, N. Y.—The application of the Buffalo, Hamburg & Aurora Electric Ry. Co. to construct its road has been granted by the railroad commissioners. The road will connect the above towns and will be about 20 or 25 miles in length. Arthur W. Hickman, Atty. The directors are: Edgar B. Jewett, W. W. Wheatley, U. L. Upson, Ernest Wende, Willis G. Gregory, L. F. Boies, W. J. Wright, A. J. Benzing, Walter Phelps, Abbott S. Griggs and James E. Curtiss.

FRANKFORT, N. Y.—Clinton Beckwith, of the firm of Beckwith & Quackenbush, is interested in obtaining a franchise for an electric road from this place to Utica. At a town election, Sept. 28, the people voted 329 to 129 in favor of the road.

GRANVILLE, N. Y.—Joseph Powers, Lansingsburg; D. S. Haines, Sandy Hill, and J. E. Derrick, Supt., Glens Falls, Sandy Hill & Fort Edward St. Ry., are engaged in securing information and making estimates for the projected electric railway from this place to Whitehall. R. M. Witherbee, Whitehall, Surv.

GREENBUSH, N. Y.—C. H. Hollingsworth, chief assistant engineer, has two parties out relocating the line of the Greenbush & Nassau R. R., from Rensselaer to Brainard's Station. Grading is now under way on two sections.

MARCELLUS, N. Y.—The railroad commissioners have granted permission to the Marcellus Electric R. R. Co. to construct its road.

NEW ROCHELLE, N. Y.—The New Rochelle Electric Ry. Co. has been incorporated with $80,000 capital and is endeavoring to obtain franchises to connect various streets with Glen Island and Hudson Park on the Sound, and also to connect with adjacent towns. The total length will be about 8 miles, and the power-house will be located at Weyman Ave. and Elm St. Extensions will be made eventually to Mount Vernon and Larchmont. Chas. Nutt, Mgr. The directors are: Allston Gerry, of Pelham Manor, William Temple Emmet, Charles Nutt, Arthur E. Walradt, Peter Cunneen, Henry L. Nelson, John J. Grennan, Samuel F. Swinburne and William H. Neilson, of New Rochelle.

NEW YORK, N. Y.—It is reported that the Metropolitan St. Ry. Co. will build a 70,000 HP. power-house, 201 x 270 ft., on the East River, between 95th and 96th Sts.

SIDNEY, N. Y.—Edw. R. Halsey, of Newark, N. J., with a corps of assistants, has commenced the surveys for the proposed electric road between this village and Franklin. The Delaware Terminal R. R. Co. is interested in the project.

WHITEHALL, N. Y.—An electric road is proposed between this place and Granville, passing through North Granville and Middle Granville. G. S. Leavenworth has been engaged to survey the line, and Joseph Powers, conculting engineer of the Troy City Ry., will furnish the estimate for the electrical equipment. R. M. Witherbee, Chn.; J. L. McArthur, Granville, Secy.; Chas. I. Baker, Troy, Treas.

BOUND BROOK, N. J.—Judge W. A. Codington, attorney for the New York & Philadelphia Traction Co., has obtained an injunction restraining the Brunswick Traction Co. and the borough council from constructing an electric road under a franchise granted Oct. 5 by the latter.

JASPER, PA.—The Addison & Pennsylvania Ry. Co. will build an electric road to connect this place with Knoxville, by way of Troupsburg. W. W. Atwood, Addison, N. Y., Gen. Supt.

McKEESPORT, PA.—The East End Passenger Ry. Co. has been incorporated with $6,000 capital, to build an electric street railway from the dividing line of the McKeesport and Versailles townships to the Driving Park. Pres., John H. Skelley.

SANATOGA, PA.—The Schuylkill Valley Traction Co. is said to be negotiating with the Pottstown Passenger Ry. Co. in relation to extending its lines from Trappe to this place, thus connecting the two roads.

WAYNESBORO, PA.—The supervisors of Washington township, Franklin county, Oct. 2, granted a franchise to the Blue Ridge Electric Ry. & Power Co to build the proposed road from Monterey to Blue Ridge Summit.

BALTIMORE, MD.—The Baltimore, Halethorpe & St. Denis Electric Ry. Co. has been incorporated, with $100,000 capital, to build an electric road from the city limits, at Frederick Road and Canton Ave., to Elkridge Landing, five miles. Isaac H. Francis and Carville D. Benson are among the incorporators.

MIDDLETOWN, MD.—Chas. McC. Lemley, civil engineer, writes us that he is making a survey between this place and Myersville, 4 miles, to ascertain the cost of construction of the proposed Frederick-Middletown Electric R. R. A 74 x 94-ft. power house will be built near here.

WASHINGTON, D. C.—The Capital Traction Co.'s central power station, having been destroyed by fire, the board of directors has decided to put in the General Electric underground conduit system for electric railways. The contract for the street work has been let to E. Saxton, and for the electrical equipment to the General Electric Co. Other contracts are being made as rapidly as possible. The new Union Depot at Georgetown is being fitted up as the company's offices. The company has secured the services of W. B. Upton as principal assistant engineer, and Dr. Louis Duncan, of Johns Hopkins Univ., as consulting electrical engineer. D. L. Carll, Ch. Engr.

CULPEPPER, VA.—It is reported that an electric road is projected between this place and Washington, Va. M. H. Crump, Bowling Green, Ky., is interested.

NEW ORLEANS, LA.—The franchise of the proposed Napoleon Ave. street railway has been sold to the Orleans & Jefferson R. R. Co., which proposes to have it in operation by next summer. The road will be about 17 miles long and will probably be operated by compressed air, as the Compressed Air Motor Co. has offered to build and equip the road with the necessary cars and guarantee them for 25 years, provided its system is adopted. The cost will be between $180,000 and $200,000. Thos. W. Castleman, Mgr.

CANTON, O.—The proposed electric railway between Akron and this city will probably be constructed early next year. W. A. Lynch may be addressed.

CLEVELAND, O.—The Cleveland, Medina & Southern Electric Ry. Co. has been incorporated with $750,000 capital to construct an electric road from this city to Columbus, Dayton and Cincinnati, by way of Linndale, Strongville and Wooster. The incorporators are: F. C. Goodman, Joseph W. Roof, W. P. Hackney, A. R. Gibson, George H. McKay, Francis C. McMillin and Joseph H. Storer.

DAYTON, O.—The Dayton & Troy Traction Co. has been incorporated with $50,000 capital to build a street railway between this city and Troy. The incorporators are: Frank M. Turner, C. C. Wise, A. G. Feight, George H. Volker and William C. Fly.——The Osborn Co., civil engineers, of Cleveland, has charge of the civil engineering features, and E. P. Roberts & Co., of the same city, the electrical and mechanical matters of the proposed electric road from this city to Eaton, which is partly under contract already. The road will be 22 miles in length and will be put in operation by April 1, 1898. Bruno Rittv, Dayton, has the contract for the track work, and the Chase Construction Co. for the overhead work. J. E. Lowes, Pres.

EAST LIVERPOOL, O.—The North Side St. Ry. Co. has been incorporated, with $10,000 capital, to operate an electric road in this city. T. C. Foster, C. N. Foster, W. H. Travis, C. Fisher and A. Watson are the incorporators.

MANSFIELD, O.—The Mansfield, Savannah & Wellington Electric R. R. Co. has asked the county commissioners to extend the time for the construction of the road from June 1, 1898, to April 1, 1900.——Reid Carpenter has petitioned the county commissioners for a franchise for an electric road from this place to Shelby.

MASSILLON, O.—The Canton-Massillon Electric Ry. Co. is reported to be about to extend its line to Navarre from the city line. Wm. A. Lynch, Pres.

PORT CLINTON, O.—The promoters of the Toledo, Bowling Green & Fremont Electric R. R. are considering the advisability of building a branch line from Fremont to Port Clinton, Lakeside and Ottawa City.

SPRINGFIELD, O.—The city council has extended the time at which Wm. H. Hanford and associates will be required to complete the proposed electric street railway to Oct. 1, 1898.

TIFFIN, O.—The right of way has all been acquired for the construction of the electric railway from this place to Fostoria. Saml. B. Surath is the owner of that part of the road which has been already completed, about two miles in all.

TOLEDO, O.—The Toledo, Bowling Green & Fremont Ry. Co. has been doing preliminary work, preparatory to the construction of some 30 miles of electric railway from Bowling Green south into the oil fields. Thos. H. Walbridge, The Nasby, Pres.; H. E. Riggs, Engr.

BIRMINGHAM, MICH.—The Oakland Electric Ry. Co. is about to put in new boilers and dynamos in its power house in this place, according to reports.

PONTIAC, MICH.—The boiler in the power house of the Pontiac Electric R. R., at this place, collapsed Oct. 7, necessitating the closing of the line until arrangements can be made with another company for the use of its power. Two new 400 HP. boilers have been ordered.

SAGINAW, MICH.—The receivers of the Union and the Consolidated St. Car Cos. have petitioned the council for permission to reconstruct a large amount of track. About $40,000 is to be expended on the two systems immediately.——It is said that the construction of the proposed electric road from Saginaw or Bay City to Port Huron is assured, the project having obtained financial backing. Chas. Montague and F. S. Wheat are the chief promoters.

CHICAGO, ILL.—All the property of the Englewood & Chicago Electric St. R. R. Co., including the equipment and franchises, valued at $1,000,000 to $2,000,000, was sold at public auction Oct. 12 to Jules S. Bache, New York, representing the reorganization committee, for $200,000. The system is said to be the only successfully operated storage battery system in the country. G. Herbert Condict, Receiver.——The Metropolitan Elevated R. R. Co. has begun to run its trains over the new Union loop. The Alley road will begin to use the loop not later than Nov. 10, according to report.

STREATOR, ILL.—According to reports the cities of Streator, Ottawa and La Salle are to be connected by an electric road, a company having been formed with $500,000 capital stock. Chas. Rathbun is said to be interested.

MILWAUKEE, WIS.—A press report states that the Milwaukee Electric Ry. & Light Co. will hereafter build all its cars in this city.

ANOKA, MINN.—At a town meeting, Sept. 22, a committee was appointed to wait on Thos. Lowry with reference to securing an extension of the electric line, in which he is interested, to this town. The distance would be about 12 miles and the cost $75,000 to $150,000.

MANKATO, MINN.—Bankson Taylor, of St. Paul, is projecting an electric street railway in this city, which he proposes to construct next year.

PINE BLUFF, ARK.—The council has been petitioned for a franchise for an electric street railway in this city. W. A. Lee may be addressed.

HOUSTON, TEX.—The Houston Electric Ry. will be extended to Etta, a suburb of this city. H. MacGregor, Gen. Mgr.

SAN ANTONIO, TEX.—The Texas Transportation Co has been organized with $25,000 capital for the purpose of building a street railway in this city. Oscar Bergstrom and Otto Koehler are the projectors of the road.

BUTTE, MONT.—Mgr. Wharton has agreed to pave the cable track from Galena to Copper in consideration of being granted a franchise to construct a single track electric railway to Walkersville, via Dutch Gulch. The line will cost $75,000 and will be 2¼ miles in length.

CANON CITY, COLO.—Orman & Crook, Pueblo, have been awarded the contract for the construction of the Canon City & Cripple Creek Electric R. R., between those cities, 30 miles. The contract price is about $1,000,000, and the road must be completed and ready for use by March 20, 1898. A power house will be built on the shore of the Arkansas River and will also furnish electricity for lighting and power purposes to many of the mines in the Cripple Creek district. The directors of the company are: Lyman Robison, Pres.; J. H. Peabody, Treas.; F. A. Reynolds, Henry Earle, Secy.; James J. Cone, Thomas S. Wells, B. F. Rockafellow, F. L. Bartlett, J. W. Harrison, F. M. Harding and C. W. Burrage; W. H. Burrage is the engineer.

PASADENA, CAL.—The Pasadena & Los Angeles Electric Ry. Co. has petitioned the trustees for a special privilege and right of way for 23 months to construct and operate a single track from the South Fair Oaks Ave. track to the rear of the Doty Block.

REDLANDS, CAL.—It is reported that all the horse car lines in the city will be changed to electric power during the winter, and the electricity will be supplied by the Redlands Electric Light & Power Co.

SAN LUIS OBISPO, CAL.—Bids are asked until Nov. 1 for the purchase of a franchise for a street railway in this city. C. F. Sammann, Cy. Clk.

SAN MATEO, CAL.—The San Mateo Electric Ry. Co. is endeavoring to effect combinations with the street railways of this city not in the Market St. system, and propose building several extensions so as to reach that street. Adolph Sutro may be addressed. It is also proposed to build a line to the Ingleside Race Track.——J. A. Buck, Gen. Mgr. of the San Mateo & San Francisco Electric Ry. Co., says that the road which now terminates at Baden will soon be extended through this city to Menlo Park.

SANTA ROSA, CAL.—The Santa Rosa & Sonoma County Electric Ry. Co. has finished 15 miles of survey in the neighborhood of Sonoma but will do no more work until $400,000 bonds shall have been disposed of in New York and London. The company intends to build 70 miles of narrow gage electric railway in Sonoma county, from Embercardero to Calistoga, at a cost of $10,000 a mile. Bonds for $700,000 will be issued.

DYEA, ALASKA.—The Dyea-Klondike Transportation Co. has been incorporated in Oregon, with $250,000 capital, to conduct a general transportation business from the headwaters of Lynn Canal to all points in Alaska and British North America, and to build tramways, bridges, wagon roads, saw-mills, etc., and to navigate the Yukon River and its tributaries, from St. Michaels to Dawson City. E. F. Cassel, Oscar R. Meyer and J. N. Teal are the incorporators.——The Trenton Iron Works, Trenton, N. J., is reported to have been awarded the contract to construct an 8-mile tramway over Chilkoot Pass for the Chilkoot R. R. & Transportation Co. of Tacoma. The Bleichert tramway system will be used, with a capacity of 120 tons daily, and is to be completed by Jan. 1. The company was organized by Hugh C. Wallace, Pres. Washington & Alaska Steamship Co., and Geo. B. Dodwell, Mgr. North Pacific Steamship Co., operating lines to the Orient. Their associates include T. B. Wallace, Pres. Fidelity Bank, Tacoma, Wash., and Assistant General Superintendent Pearce, of the Northern Pacific Ry. It is said that the money has all been raised and nearly 100 men are now working on the railroad.

MONTREAL, QUE.—The city council has decided to allow the Montreal St. Ry. Co. to build the Cote des Neiges line to Cedar Ave.

VANCOUVER, B. C.—Davis, Marshall, MacNeil & Abbott are the solicitors for a company seeking a franchise from the legislative assembly for an electric railway in this city.——The British Columbia Electric Ry. Co. is about to erect a power house at Goldstream, equipped with Pelton water-wheels.

GLASGOW, SCOTLAND.—Bids are asked until Oct. 20 for the electrical equipment of the Springburn & Mitchell St. railway line. Check, £10. John Young, 88 Renfield St., Gen. Mgr.; J. D. Marwick, Town Clk.

HULL, ENGLAND.—Bids are asked until Nov. 5 for the electrical equipment of about 9 miles of double track and one half mile of single track. Also 15 motor cars and 5 trailers. Check, £10. A. E. White, Cy. Engr.; Thos. G. Milner, Cy. Treas.

VIENNA, AUSTRIA.—The municipal authorities are at present considering a proposal to obtain a loan of £3,000,000 for the construction of electric tramways over the entire city. The amount would include the cost of purchasing the existing systems.

SYDNEY, N. S. W.—The republic works committee is still considering the proposal to extend the railway into the city and build a terminal station at St. James' Road, at an estimated cost of £650,000. Henry Deane, Engr.-in-Ch., Ry. Constn. Br.; D. Kirkcaldie, Gen. Traffic Mgr.

ELECTRIC LIGHT AND POWER

PITTSFIELD, ME.—The construction of a new electric light plant is being considered, according to reports.

READFIELD, ME.—A company is stated as being organized to construct an electric light plant for this place, Hunt's Hill and Winthrop, Me.

EXETER, N. H.—The Rockingham Electric Co. is now putting in 60 electric arc lights, in accordance with its contract with the town, which at a recent town meeting appropriated $5,000 for lighting with electricity.

BETHEL, VT.—The power plant about 1¼ miles south of this place is reported as about completed. The dam will be 240 ft. long and is over 20 ft. high. The dam in its construction will contain 200,000 ft. B. M., of timber, 100 bbls. of Portland cement, about 150 sq. yds. The flume will be 18 ft. deep and 22 ft. wide, and the wheel pit 30 × 28 × 26 ft. The power house will be 30 × 45 ft., and the gate house 9 × 22 ft.; estimated cost of plant, $20,000. Supt., E. C. Waite, North Adams, Mass.; Des. Engr., I. M. Frost.

BOSTON, MASS.—The council proposes to grant the trustees of the Children's Institution, Rainsford Island, permission to construct an electric light plant to cost about $10,000.

MILLBURY, MASS.—W. E. Horne is building a private electric light plant of 150 incandescent lights. It is proposed later in the season to extend the plant to the nine tenements owned by Mr. Horne.

MILFORD, MASS.—It is reported that the Milford Electric Light & Power Co. will build a new power house in the spring. Geo. W. Goddard, of Boston, Mass., is interested.

BUFFALO, N. Y.—The police commissioners have recommended that the contract for electric wiring for the police and fire departments be awarded to the Standard Underground Cable Co., Pittsburg, Pa., at $15,838.

KINGS PARK (L. I.) N. Y.—It is stated that the contract for electrical work at the Kings Park State Asylum has been awarded to A. J. Martin, Brentwood, L. I., at about $36,000. Mr. Martin holds a similar contract at the Central Islip Insane Asylum.

LANCASTER, N. Y.—Ernest Feyler, of the Lancaster Electric Light & Power Co. has been awarded a contract by the Clarence E. Rood Malleable Iron Works, Lancaster, for furnishing the shop with light and power.

DOLGEVILLE, N. Y.—The Dolgeville Electric Light & Power Co. has been granted a 50-year franchise. Pres., W. S. Armstrong. Mayor Dasey may be addressed.

DUNDEE, N. Y.—Edward L. Bailey, Penn Yan, N. Y., is said to be securing subscribers to a proposed electric light plant for this place.

LOCKPORT, N. Y.—It is stated that the council's committee on finance will report in favor of a renewal of the contract between the city and the Hydraulic Race Co. for water-power to operate the pumps in the city pumping station. The contract will be for two years with the privilege of renewing for seven years at the same terms. Heretofore the city has paid $1,500 a year for power. Under the new contract it will pay $1,250 for the power used.

ROME, N. Y.—The Utica Electrical Mfg. & Supply Co., Utica, N. Y., is said to have been awarded the contract for putting in an electric light plant at the Rome Teakettle Works.

TRENTON FALLS, N. Y.—Work will probably soon be begun on the proposed Trenton Falls power plant. E. S. Mathews and Elliott H. Stewart, Utica, N. Y., have purchased the land and are said to be considering the purchase of the machinery. The plant will furnish 13,000 HP., and is estimated to cost about $25,000. Des. Engr., W. C. Johnson, Niagara Falls, N. Y.

WHITESTONE (L. I.) N. Y.—An election will be held Oct. 29 to vote on the question of issuing $3,000 in bonds for operating the electric light plant.

CORAOPOLIS, PA.—Bids are asked until Oct. 20 for furnishing the materials, machinery and constructing an electric light plant at this place; deposit required, $250. W. M. Stanton, Pres. Council; Junius D. McCabe, Borough Engr., 314 4th Ave., Pittsburg, Pa.

ERIE, PA.—The councils are considering the question of issuing bonds for constructing a plant to cost about $100,000. Councilmen Leech and Sherwood may be addressed.

KANE, PA.—Adrian Sizer, Council Light Comr., writes us that the Kane council is contemplating putting in a municipal electric light plant and is considering the matter of getting out specifications by which to receive bids. H. H. Clayson, Burgess; B. N. McCoy, Pres. Council.

PHILADELPHIA, PA.—Bids are asked until Oct. 22 for furnishing arc lights for 1898 in the 17th, 18th, 19th and 31st wards. F. M. Riter, Dir. Dept. Pub. Safety, Room 217 City Hall.——The electrical experts appointed in May, 1896, have submitted a report in which they favor the establishment of four municipal electric light plants. The various stations as recommended in the report will have a total capacity of over 12,000 lights. An installation of 4,806 HP. is favored for station A, and 1,200 HP. for each of the other three stations. The estimated cost of the four stations is $1,562,731; maintenance, $583,665. If the underground system should be used the cost would be $3,475,867. J. J. De Kinder, Girard Bldg.; M. R. Muckle and A. S. Vogt, Philadelphia, are the experts.

PHILADELPHIA, PA.—Local papers state that the Pennsylvania Heat, Light & Power Co. is about to install two new boilers and a big stack at the Brush Electric Co.'s works, at 20th and Johnson Sts., below Market, at a cost of $12,000.

PITTSBURG, PA.—Bids are asked until Oct. 20 for constructing an electric light plant for a town in this vicinity, according to reports. J. J. McCabe, Borough Engr., 314 Fourth Ave., Pittsburg.

CUMBERLAND, MD.—The plans prepared for an electric light plant by the F. B. Rae Engineering Co., Chicago, Ill., have been accepted and the city clerk is said to have been directed to ask for bids for the construction.

WILLIAMSPORT, MD.—The board of trade is reported as about to ask the legislature for permission to issue bonds for an electric light plant and water-works. J. L. Motter and Jos. F. Findlay are on the committee.

RICHMOND, VA.—The Virginia Electric Co., Baltimore, Md., has applied to the council for permission to use the water power of the James River for supplying manufacturing plants of this city with power. Councilmen Ebel, Bahen and Foster may be addressed.——The Home Electric Co. has asked for a franchise for a general electrical business. Councilmen Starke, Hardwicke and Hawkins may be addressed.

ASHVILLE, N. C.—The electric plant of the West Ashville Improvement Co. was sold on Oct. 7 to a new company. The plant will be enlarged, besides building a small amount of street railway. Dr. J. H. McAden, of Charlotte, N. C., is president of the company.

WELDON, N. C.—The power plant of the Roanoke Navigation & Water Power Co. will be sold at auction Nov. 10. It is stated by the trustees that the water right of this company are capable of a development of 16,454 HP. Henry C. Hardy, 50 Broadway, New York, and W. J. White, Warrenton, N. C., are the trustees.

COLUMBUS, GA.—Edward Swift and Jas. Kyle, of the Muscogee Mfg. Co., and the Georgia Mfg. Co., are considering estimates for power and electric light machinery for their plants.

FLOVILLA, GA.—Press reports state that plans will probably be prepared for developing the water power at Ocmulgee Mills, near Flovilla. It is thought that 20,000 HP. can be secured.

OCALA, FLA.—An election will be held Oct. 19 to vote on the question of issuing bonds for the purchase or erection of an electric light plant.

BRISTOL, TENN.—Bids are reported as being asked by the Bristol Gas & Electric Co. for furnishing (new or second hand) a horizontal tubular boiler of 125-HP., a 250-HP. engine, a 2,400 light dynamo, etc.

BARDWELL, KY.—The construction of an electric light plant and water-works is being considered.

BELLEFONTAINE, O.—Press reports state as follows: The state board of public works has allowed City Engineer James C. Wonders, Bellefontaine, an option of one year on all the water in Lewistown reservoir, situated near here. The body of water is 17,000 acres in area. Mr. Wonders will utilize the water to furnish power for electricity in connection with the electric railway line proposed by local capitalists between the reservoir and this city.

BELLE CENTER, O.—Bids are reported as being asked for the construction of an electric light plant. E. F. Ellis, Town Clk.

PERRYSBURG, O.—Bids are asked until Oct. 23 for constructing an electric light plant, according to reports. F. M. Franey, Corporation Clk.

GAS CITY, IND.—It is said that the council has asked for bids for constructing an electric light plant and water-works; population 4,000. Des. Engr., Jas. B. Nelson, 64 Baldwin Block, Indianapolis, Ind.

HAMMOND, IND.—Bids are said to have been asked until Oct. 13 for constructing an electric light plant for West Hammond, Ill. Martin H. Finneran, Clk.

CHICAGO, ILL.—The Cicero Water, Gas & Electric Light Co. has offered to sell its Oak Park plant to the township of Cicero for $1,820,000, to be paid in 26 installments. A committee of citizens has been appointed to investigate the advisability of making the purchase and to report within two weeks to the town board. President Traill, of the town board, was elected on pledges to push municipal ownership and the present agitation is the outgrowth of his efforts. It is generally conceded, however, that the company will have to scale down its price before the town will seriously consider the purchase.

WATERLOO, ILL.—Bids are asked until Oct. 30 for constructing an electric light plant. Engr., Hiram Phillips, 306 Oriel Bldg., St. Louis, Mo.

BALDWIN, WIS.—Arthur Peabody is said to be considering the question of putting in an electric light plant.

IRON MOUNTAIN, WIS.—Press reports state as follows: The Norway Electric Co., Norway, Mich., has purchased from Hamilton & Merryman, Marinette, Wis., all of the water power on the Sturgeon River in this county for $10,000. One piece of property included in the sale is that recently surveyed by C. P. Pride, Appleton, Wis., which contained a 90-ft. head and a fall of 12,000 cu. ft. of water. It has a capacity of 2,000 HP. Work on improving the power was begun at once with a gang of 25 men. This number will be increased as the progress of the work demands. Estimated cost, $12,000.

MINERAL POINT, WIS.—The Mineral Point Electric Co. is building a new plant. J. D. Wallace, Consult. Engr., Champaign, Ill., and Mineral Point.

ORTONVILLE, MINN.—S. A. Thomas, Cy. Recdr., writes us that this place voted Oct. 4 in favor of issuing $15,000 in bonds for an electric light plant and water-works. The plants will probably be completed this fall. Engr., Chas. F. Loweth, St. Paul, Minn.

CASSELTON, N. DAK.—Bids were asked by the council until about Oct. 12 for constructing an electric light plant. Mayor Gilbert may be addressed.

PUKWANA, S. DAK.—The construction of a plant in this place is reported as being considered.

BUTTE, MONT.—It is reported that the James Leffel Water Wheel Co., Springfield, O., has been awarded a contract by St. Paul capitalists for furnishing six turbine water wheels of 1,000 HP. each for a $2,000,000 power plant to be established near Butte, on the Big Hole River. While the plant will furnish electricity to Butte and power for general purposes, it is being built chiefly to supply power to several large copper mines.

MILAN, MO.—Wm. McClanahan, Mayor, writes us that the city voted Oct. 5 to issue $18,000 in bonds for an electric light plant and water-works. Engr., Steve Hall, Kirkville, Mo.

ST. LOUIS, MO.—The Suburban Electric Light & Power Co., of St. Louis county, which has been furnishing electric light for the past five years to Webster Groves, Kirkwood and Old Orchard, and the territory bounded on the north by Manchester Road, south by the Watson Road, west by Geyer Road and east by the city limits, is preparing to extend its plant, and to that end has applied to the county court for an extension of its franchise so as to embrace the whole county.——The Edison Illuminating Co., of St. Louis; the Missouri Electric Light & Power Co.; the Electric Light, Power & Conduit Co., of St. Louis; Phoenix Light, Heat & Power Co.; the Edison Electric Illuminating Co., of Carondelet, and the Imperial Electric Light, Heat & Power Co. are arranging for the construction of the proposed electric light wire conduits in various streets.

LOS ANGELES, CAL.—Bids are asked until Oct. 18 for lighting the streets of this city for one year; bond, $5,000. C. H. Hance, Cy. Clk.

MARYSVILLE, CAL.—The Nevada County Electric Power Co. is reported as making arrangements for letting contracts for furnishing this place and Browns Valley and the mines of the vicinity with electric light and power. It is said the power will be transmitted a distance of 60 miles. E. T. de Sabla, Jr., is interested.

NEVADA CITY, CAL.—Bids are asked until Oct. 21 for furnishing 60 incandescent lights for the streets and public buildings for a period of one year. T. H. Curtis, Clk. Bd. Cy. Trustees.

REDDING, CAL.—J. E. Terry, owner of the Shasta Lumber Co.'s plant at Belle Vista, Shasta county, is making arrangements to put in an electric light plant. The dynamo will be run by water power.

SAN LEANDRO, CAL.—It is stated that an election will soon be held in this place to vote on the question of issuing bonds for an electric light plant. H. F. Ely and Geo. Downie, Village Trustees, compose the committee.

MAGOG, QUE.—The Canadian General Electric Co. is constructing a plant in this city.

ORANGEVILLE, ONT.—Bids are asked until Nov. 1 for furnishing and putting in place 29 electric arc lights and for lighting the streets and public property for a term of one, two or three years. Wm. Wallace, Chn. Street Lighting Com.

NEW COMPANIES.—Maplewood Electric Light & Power Co., Attica, N. Y.; $10,000; Frederick C. Stevens, Edwin T. Gay, Augustus A. Smith, Burley Smith, Nicholas Redding, Attica.

Hyrum & Wellsville Electric Light & Power Co., Logan, Utah; $50,000; Pres., Bishop J. F. Wright; Vice Pres., W. H. Maughn; Secy. and Treas., James Unsworth.

Missouri Edison Electric Co., St. Louis, Mo.; $4,000,000; A. D. Brown, Pres. Hamilton-Brown Shoe Co.; Charles L. Marrill, Wm. T. Ried, Isaac H. Orr, E. L. Adams.

Commercial Electric Arc Lamp Co., New York, N. Y.; $100,000; Henry C. Jacobs, Adam E. Schatz, Mount Vernon, N. Y.; George E. Eschwei, Long Island City, N. Y.

Winamac Water & Light Co., Chicago, Ill.; $20,000; operate water and light plant; John P. Miller, John Davis, William Haberkamp.

Carbon Light & Power Co., Camden, N. J.; $25,000, with $5,000 paid in; Jas. E. Hays, Samuel Hufty, Camden.

Sprague Electric Co., Watsessing, N. J.; $4,000,000; Frank J. Sprague, New York; Albert B. Chandley, Brooklyn.

Columbia Electric Light & Gas Co., Portsmouth, Va.; $5,000, with power to increase to $100,000; Pres., Charles Adamson, Cedartown, Ga.; Secy. and Treas., Wm. E. Stokes, Philadelphia; directors, Charles Adamson, Wm. E. Stokes, Griffin Callahan, Philadelphia; J. Walter White, Philadelphia.

BRIDGES

BOSTON, MASS.—Bids are asked until Oct. 21 for constructing three sections of the Charlestown approach of the Charlestown bridge, as stated in our advertising columns. Geo. G. Crocker, Chn. Boston Transit Comn., 20 Beacon St.——Bids are asked by the commissioners of Boston and Cambridge on Harvard Bridge, at 30 City Hall, until Oct. 15, for sheathing the roadway of Harvard bridge.——Reed & Fowler, Oct. 8, were awarded the contract for building the masonry abutment across Summer St., on the westerly side line of Fort Point Channel, at $14,300. William Jackson, Cy. Engr.

ALBANY, N. Y.—The following bids were received Sept. 28 by Geo. W. Aldridge, Supt. Pub. Wks., for constructing a bridge over Oswego Canal in this city: Rochester Bridge & Iron Works, Rochester, N. Y. (accepted), $23,561; Frank Pidgeon, Saugerties, N. Y., $26,148; Hilton Bridge Construction Co., Albany, N. Y., $24,781; Groton Bridge & Mfg. Co., Groton, N. Y., $25,293; Havana Bridge Works, Montour Falls, N. Y., $28,780.

FORT PLAIN, N. Y.—Bids are asked until Oct. 21 for building a lift bridge over the Erie Canal at River St. Geo. W. Aldridge, Supt. Pub. Wks., Albany, N. Y.

HIGGINSVILLE, N. Y.—The Wrought Iron Bridge Co., of Canton, O., has been awarded the contract for building the towing path swing bridge at this place, at $3,125. Geo. W. Aldridge, Supt. Pub. Wks., Albany, N. Y.

NEWFANE, N. Y.—The Owego Bridge Co., of Owego, N. Y., has been awarded the contract for building the bridge across the creek at Olcott, at $2,800. John Dowding, Highway Comr. of Newfane; Geo. E. Shaw, Supvr.

NEW YORK, N. Y.—The New East River Bridge Commission, at 49 Chambers St., Oct. 6, awarded and signed the contract between Shanley & Ryan, for the New York anchorage, and the Degnan-McLain Construction Co., for constructing the Brooklyn anchorage; for itemized bids see Engineering News of Sept. 23. L. L. Buck, Ch. Engr.

LANCASTER, PA.—Bids are asked by the commissioners of Lancaster county, until Oct. 21, for erecting an iron bridge 120 ft. between abutments, with a 16-ft. roadway across Pequea Creek, between the townships of Strasburg and West Lampeter, on the road leading from Lampeter Square to Strasburg Borough.

NORTH BRANCH, MD.—The large covered bridge over the Patapsco River at this place is in a dangerous condition. It will probably be replaced by a new structure, as the bridge connects with the Liberty Road and is on the line of traffic between Carroll and Baltimore counties.

SPARTANBURG, S. C.—F. C. Black, County Engr., informs us that the commissioners of Spartanburg county are erecting five steel highway bridges as follows: Coulter's Ford, with one 100-ft. span, with steel approaches 60 and 32 ft. long; Anderson's, one 80-ft. span, with steel approaches 60 and 40 ft.; Whitney, one 74-ft. span; Lolo, one 140-ft. span; Musgroves, six 58-ft. spans.

RIVER VIEW, FLA.—Bids will be received, according to reports, at the next meeting of the county commissioners to build a new county bridge across the Little Manatee River, on the Tampa and Palmetto Road.

CLEVELAND, O.—Bids were asked until Oct. 13 for erecting the superstructure of a bridge over the West Side Boulevard at the Lake Shore & Michigan Southern Ry.; bond required, $5,000. C. W. Pratt, Ch. Engr., Bd. of Park Comrs., 76 Euclid Ave.

COLUMBUS, O.—Bids are asked until Oct. 26 for all the materials and labor necessary to build the approaches of the new bridge across the Big Walnut Creek, northeast of Central College, requiring about 5,500 cu. yds. of embankment and fill, etc. W. H. Halliday, Comr. Franklin county.——The Columbus Bridge Co., Oct. 2, was awarded the contract for building the superstructure of the above Central College bridge at $5,880; C. D. Schwartz & Co. were awarded the contract for the substructure at $4,827.

TIFFIN, O.—Bids are asked until Oct. 23 for constructing an iron foot bridge across the railways on Jackson St. J. B. Ehrenfield, Cy. Clk.

WEST CARROLLTON, O.—Bids are asked until Oct. 30 for the substructure and superstructure of a swing bridge to be built over the Miami and Erie Canal on the Deemer Road at this place; deposit required, $500. A. G. Feight, County Audr., Dayton, O.

INDIANAPOLIS, IND.—The following bids made by the Wabash Bridge Co. were the lowest for constructing sundry bridges in this city: For the McCauley St. bridge, $782; the Stoughton St. bridge, $906; the Barth Ave. bridge, $1,637; the New Jersey St. bridge, $1,400; the Oriental St. bridge, $1,360.

PORT HURON, MICH.—F. F. Rogers, Cy. Engr., informs us that the following bids were received Oct. 4 for constructing a steel swing bridge over Black River, at 10th St., and which will be 220 ft. long, with a 180 ft. steel trestle approach on the north side and a 60 ft. plate girder approach on the south side, and which, with the substructure complete, will contain about 405,000 lbs. of steel:

A. J. Duffus & A. J. Wenzel, Detroit, Mich.	$25,040
Wrought Iron Bridge Co., Canton, O.	24,215
King Bridge Co., Cleveland, O.	23,300
Variety Iron Works, Cleveland, O.	22,942
Ohio Bridge Co., Toledo, O.	22,500
Massillon Bridge Co., Massillon, O.	22,030
Pittsburg Bridge Co., Pittsburg, Pa.	21,590
Toledo Bridge Co., Toledo, O.	20,960
Youngstown Bridge Co., Youngstown O. (accepted).	20,640

OMAHA, NEB.—Reports state that the 16th St. viaduct has been declared unsafe and that it will probably be repaired at once at a cost of $6,000.

CROMWELL, MINN.—Bids are asked until Nov. 1 for constructing three pile bridges. H. B. Paine, Town Clk.

FERGUS FALLS, MINN.—The following bids have been received for constructing the Lincoln Ave. bridge: Wrought Iron Bridge Co., Canton, O., $2,587; Milwaukee Bridge & Iron Co., $2,680; Wisconsin Bridge & Iron Co., Milwaukee, Wis., $2,925; Wm. S. Hewett, Minneapolis, Minn., $3,094; Van Norman Bridge Co., Minneapolis, Minn., $3,200; Gillette-Herzog Mfg. Co., Minneapolis, Minn., $3,338.

ST. PAUL, MINN.—The council has contracted with the Chicago Bridge & Iron Co. to furnish plans for a new bridge over the Zumbro River at 5th St. Bids will probably be asked as soon as plans are prepared.

ST. LOUIS, MO.—Contracts will soon be let for constructing the new "third bridge" in this city, as plans for the same have been sent to the war department at Washington, D. C., by P. A. S. Tullock, of Leavenworth, Kan., Ch. Engr., East St. Louis & St. Louis Construction Co., and also a member of the bridge commission.

MERCED, CAL.—W. H. McElroy has been awarded the contract for removing the Bear Creek bridge and of building a new one in its place, at $1,000.

SACRAMENTO, CAL.—E. E. Barry has been awarded the contract by the board of supervisors for building and repairing the trestle on the Upper Stockton Road, near McConnell's Station, at $6,942.

HULL, QUE.—It is reported that a new iron bridge will be constructed over the Lievre River, between Masson and L'Ange Gardien, and that the chief engineer of public works has plans for the same.

BUILDINGS.

PITTSFIELD, MASS.—It is reported that Samuel W. Bowerman contemplates erecting a $150,000 hotel in this city.

WATERBURY, CONN.—A 5-story brick and stone store and tenement building will soon be erected here for Frederick H. Humphrey, 22 Chestnut Ave., to cost about $40,000. Arch., Theo. B. Peck, 65 Bank St.

BROOKLYN, N. Y.—Bids are asked until Oct. 18 for the entire material and labor required for erecting the 13th Regiment armory in this city. Mayor Frank Wurster, Chn. Armory Com.; Charles Werner, Arch., 103 Garfield Bldg., 26 Court St.——Von Glahn Bros., 88 Washington Ave., will have eight 3-story brick flat buildings erected on Stanhope St., near Irving Ave., to cost $40,000. Arch., W. B. Wills, 17 Troutman St.——Two 4-story brick and stone flat buildings will be erected at Franklin and Greene Aves., for Henry Roth, 1058 Broadway, New York; estimated cost, $30,000. Arch., H. Vollweiler, 483 Hart St.

BUFFALO, N. Y.—Competitive plans for the new building of the Buffalo Savings Bank have been submitted by the following architects: Robt. W. Gibson, 18 Wall St., and M. Eidlitz, of New York; A. C. Esenwein, Green & Wicks, Bethune, Bethune & Fuchs, M. E. Beebe & Son, C. K. Porter & Son, George Cary, Lansing & Beierl and E. A. Kent, of Buffalo. The building is to be constructed of granite or terra cotta and located at Main, Huron and East Genesee Sts.; estimated cost, $300,000.——The Buffalo Catholic Institute is now prepared to begin the construction of its new home, after the modified plans of Metzger & Greenfield, White Bldg., approximate cost, $60,000.

NEW YORK, N. Y.—J. T. Brady was awarded, Oct. 11, the contract for remodelling the interior of the city hall for the offices of the incoming government, at $181,500. Other bids were those of Rudolph Hilderbrandt, at $190,-260; J. D. Murphy, at $195,000; William Baumgartner, $193,800.——Plans have been filed by Tuchman, Isaacs & Jacobson, 207 East Houston St., for four 6-story brick tenement and store buildings at 127 to 135 Goerck St., to cost $100,000. Archs., Schneider & Herter, Bible House; by Bell, Groth & Teichman, for three 5-story brick flat buildings on 108th St., near Amsterdam Ave., to cost $60,-000. Arch., C. A. Millner, 81 East 125th St.; by L. C. Sorenson, 355 West 29th St., for two 6-story brick tenement and store buildings at 505 West 27th St., to cost $50,000. Arch., G. Fred. Pelham, 503 5th Ave.——The following bids were received by the board of education, at 585 Broadway, Oct. 11, for erecting a new school building on 119th and 120th Sts., between 2d and 3d Aves.:

P. J. Walsh, 76 Edgecombe Ave.	$307,000
P. J. Brennan, 22d St and 6th Ave.	307,750
J. J. Hopper, 215 West 125th St.	309,000
Murphy Bros., 401 East 101st St.	309,776
Harry McNally, Associated Charities Building.	311,000
P. Gallagher, 156 5th Ave.	311,264
Thomas Cockerill & Son, 550 West 41st St.	323,000
P. Mahony & Sons, 156 5th Ave.	325,400
Jas. D. Murphy, 1181 Broadway	327,700
Mapes-Reeve Construction Co., 150 Nassau St.	331,000
Luke A. Burke, West 59th St.	333,646
Thomas Dwyer, Temple Court	339,500

For improving lots in the rear of Grammar School No. 83, 215 and 217 East 109th St.:

Hartman & Horgan, 253 East 8th St.	$13,787
Alfred Nugent & Son, 41 Columbia St.	13,959
John Fury, 1684 2d Ave.	14,295
Ryan & McFerran, 106 East 23d St.	15,781
Christopher Nally Co.	15,885
Mahoney Bros., 52 New Bowery	16,590
James Hamilton, 102 West 81st St.	16,612
C. & P. Ryan, City	17,974
Patrick Sullivan, City	18,700

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until Oct. 18, for erecting a new building for the hall of the board on the southwest corner of Park Ave. and 50th St.——Bids are asked by the fire department, 157 and 159 East 67th St., until Oct. 20, for erecting a department building on Grand Ave. (East 233d St), near Katonah Ave.; bond required, $8,000.——Plans are filed by John M. Linck, 685 East 135th St., for eight 5-story brick flat buildings on Willis Ave., near 141st St., to cost $180,000. Archs., Neville & Bagge, 217 West 125th St.; by Henry D. Bayne, Stapleton (S. I.), N. Y., for a 6-story brick and stone flat building at 128 and 130 West 127th St., to cost $77,000. Arch., H. E. Hartwell, 153 5th Ave.; by Isaac Mayer, 69 East 107th St., for four 5-story brick flat and store buildings at 101st St. and Madison Ave., to cost $100,000. Arch., John Hauser, 1441 3d Ave.; by Rose McQuade, 175 East 123d St., for a 5-story brick tenement and store building at 107th St. and Manhattan Ave., to cost $40,000. Arch., Henry B. Van Benschoten, 1234 Freeman St.

NEW YORK, N. Y.—Bids are asked by the health department, Criminal Court Bldg., until Oct. 26 for building an ambulance station and vaccine laboratory extension on 17th St., east of Ave. C. The following bids were received Oct. 12 for the plumbing and gas piping required in the U. S. Appraiser's Warehouse in this city; C. E. Kemper, Acting Supervising Arch., Washington, D. C.:

		Time.
Edward Joy, Syracuse, N. Y.	$37,818	6 mos.
L. L. Leach & Son, Chicago, Ill.	32,000	7 "
Wm. N. Tobin, New York	43,380	160 days.
Jas. Fay, New York	39,300	7 mos.
Christopher Nally & Co., New York	49,793	6 "
Jas. Harley, Brooklyn, N. Y.	29,985	125 days.
Thos. J. Byrne, New York	41,045	7 mos.
F. P. Gleason & Son, Chicago, Ill.	35,596	6½ "
J. Manneschmidt, Brooklyn, N. Y.	36,109	7 "
J. F. Dalton, New York	30,189	7 "
Montgomery & Pattison, New York	37,000	120 days.
O'Brien & Ryder, New York	35,460	6 mos.

SONYEA, N. Y.—The following bids were received by Jesse B. Wadsworth, Chn. Administration Com., for constructing an administration building and four other buildings for the State Colony for Epileptics at Sonyea. George J. Metzger, Arch., 49 West Huron St., Buffalo, N. Y.:

Joseph Fleckenstein, Rochester, N. Y.	$85,753
Charles Mosler, Buffalo, N. Y.	87,280
J. J. Churchyard, Buffalo, N. Y.	88,437
John Feist, Buffalo, N. Y.	89,472
H. H. Edgerton, Rochester, N. Y.	96,700
J. Hilenbrandt, Rochester, N. Y.	97,000
G. W. Aldridge, Rochester, N. Y.	97,911
F. P. Stallmann, Rochester, N. Y.	102,489
Joseph Metz, Buffalo, N. Y.	103,978

ATLANTIC CITY, N. J.—It is reported that a 3-story brick hotel will be erected in this city for Mrs. Mary Wooten, proprietress of Leland House; estimated cost, $70,000.

PATERSON, N. J.—The McIlvain-Unkerfer Co., of Pittsburg, Pa., has been awarded the contract for erecting the post-office building in this city, at $126,800.

DEVON, PA.—Bids are being received for erecting a new ward for the Consumptives' Presbyterian Hospital at this place. The building will be 2½-stories high, of granite, and is estimated to cost $50,000. Arch., Charles McCaul, 10 North 11th St., Philadelphia, Pa.

ERIE, PA.—The rector, warden and vestry of St. Paul's Church have been granted a permit to erect a brick parish house near Peach and Sassafrass Sts., to cost about $10,-000. Contractors, Lininger & Graham.

FRANKLIN, PA.—Local papers state that the school board has decided to erect a new school building to cost $25,000.

MONTEZUMA, GA.—It is reported that McKenzie's iron cotton warehouse was entirely destroyed by fire; estimated loss on building, $40,000.

WASHINGTON, D. C.—Bids are asked by the district commissioners until Oct. 15 for constructing an 8-room brick school building at First and Quincy Sts., N. E.

CHATTANOOGA, TENN.—Plans are bing prepared for a school building which will soon be erected here.

PORT ROYAL, S. C.—Bids are asked until Nov. 1 for constructing an officer's quarters at the naval station at this place. Major F. L. Denny, U. S. Marine Corps, Washington, D. C.

LEXINGTON, KY.—The Combs Lumber Co., of this city, has been awarded the contract for rebuilding the court house, at $30,070.

CINCINNATI, O.—Plans have been prepared for a $65,000 school building, to be erected at Bremen and Findley Sts. Arch., H. E. Siter.

CLEVELAND, O.—A permanent exposition and auditorium building to be built of iron, glass and brick at a cost of about $200,000, is contemplated for this city; it will probably be erected by a stock company. John G. Scorer is interested in the project.

DETROIT, MICH.—Plans have been prepared for a 3-story brick and stone apartment house to be erected in this city at a cost of $30,000. Arch., F. J. Greiner, 130 Buhl Block.——A fire in this city Oct. 7 destroyed the Detroit Opera House, the 10-story building occupied by the Henry R. Leonard Furniture Co., the building occupied by the C. H. Michel Table Supply Co., and other buildings, causing a reported loss of between $700,000 and $750,000; insurance, about $400,000.

DETROIT, MICH.—Bids are asked until Nov. 6 for constructing two double sets of officers' quarters. Capt. F. Von Schrader, Asst. Q. M.

SAGINAW, MICH.—Bids are asked until Oct. 27 for the installation of a low pressure, return circulation, steam-heating and ventilating apparatus in the post-office building in this city. C. E. Kemper, Acting Supervising Arch., Washington, D. C.

CHICAGO, ILL.—Reports state that an 8-story brick, stone and terra cotta apartment building will be erected at Goethe and Stone Sts. for August Brosseau, commission merchant, 55 Board of Trade Bldg.; estimated cost, $125,000.

WATERTOWN, ILL.—The following bids have been received for the steam-heating, electric wiring, plumbing, etc., of the Illinois Western Hospital at this place. F. W. Gould, Pres. Bd. Trustees: D. M. Quay & Co., Chicago, Ill., $18,693; F. P. Gleason & Son, Chicago, Ill., $20,465; L. J. Mueller Furnace Co., Chicago, Ill., $18,250; Saml. I. Pope Co., Chicago, Ill., $18,200; Allen Myers & Co., Rock Island, Ill., $20,471; Davis Co., Moline, Ill. (accepted), $17,975.

GRANT CITY, MINN.—Plans will be completed Oct. 20 for the new court house to be erected in this city. It will be a brick building, 71 x 81 ft., and will cost about $25,-000. Archs., Orff & Guilbert, Minneapolis, Minn.

ST. PAUL, MINN.—Bids were received Oct. 5 for constructing the approaches of the post-office, court house and custom house building in this city, the lowest bid being that of John H. Nickel, of St. Paul, at $7,397; time, 65 working days. The next lowest bid was that of P. F. Ulmer, Jr., of St. Paul, at $7,822; time, 70 days.

ST. LOUIS, MO.—An ordinance has been introduced in the council by John A. King providing for the demolition of the present courthouse and the erection in its place of a 10 or 12-story office building. The building would be erected by a company to be known as the Court House Improvement Co., and the city would be permitted to use three floors in lieu of taxes and rent for 100 years.

TOPEKA, KAN.—Bids are asked until Nov. 6 for the finishing of certain portions of the interior for the dome of the state capitol building in this city. J. W. Leedy, Pres. Executive Council; T. H. Lescher, State House Arch.

SALT LAKE CITY, UTAH.—Bids are asked by the county commissioners until Oct. 20 for the excavation, mason work, carpentry work, heating and ventilating, etc., of the Salt Lake county infirmary. Arch., S. C. Dallas, 372 South First West St.

WATER-WORKS.

NORTHPORT, ME.—The Northport Mountain Spring Water Co. is reported as making improvements to its plant. A reservoir of 253,000 gallons will be built. Engr., Leonard Metcalf, 89 State St., Boston.

BRIDGTON, ME.—The Bridgton Water Co. has been organized at Bridgton, for supplying the town with water for all purposes; capital stock, $100,000, with $300 paid in. Charles A. Bodwell, of Sanford, Me.; Treas., Winburn A. Staples, Bridgton.

TURNER, ME.—It is reported that works for this place are proposed.

BOSTON, MASS.—Bids are asked by the Metropolitan Water Board until Oct. 15 for laying 6,200 ft. of 12 to 48-in. cast-iron water pipe in Chelsea and Brighton. W. N. Davenport, Secy., 3 Mount Vernon St., Boston.——Edward Kendall & Sons, Cambridgeport, Mass., submitted the lowest bid to the water board last week for extending the Chestnut Hill pumping station at $3,140. The board proposes to put in another triple-expansion engine in order to force the water to Spot Pond for distribution.

ALBANY, N. Y.—Hilt & Johnson have been awarded the contract for constructing a water filter at $1,975.——It is expected that definite action will soon be taken by the water board in regard to a new reservoir near the old Bleecker reservoir.

CATSKILL, N. Y.—Wm. Comfort, Supt. Water-Works, writes us that the proposition to issue $130,000 in bonds for a gravity system was defeated at the election held Oct. 4. There will be no change in the plant.

GREECE, N. Y.—The Rochester Tile Works Co. has applied to the executive board of Rochester for permission to secure a water supply from the Rochester water-works.

ROME, N. Y.—The Stanwix Engineering Co., Rome, has submitted a report on the proposed new works for this city. A system can be constructed at an estimated cost of from $90,000 to about $100,000. Supt., H. S. Wetherbee.

SYRACUSE, N. Y.—The business men of Elmwood are considering the question of a water supply. Allen, Farrington & Co., Consult. Engrs., Kirk Block, Syracuse, have submitted a proposition to investigate the advisability of works. Elmer L. Wood, Pres. Elmwood Business Men's Assoc., and W. W. Morris, Secy., may be addressed.

HOLLAND PATENT, N. Y.—Ira D. Thomson, Chn. Com., writes us that Francis K. Baxter, Utica, N. Y., is making surveys and estimates for a gravity system to cost about $8,000; population, 500. H. A. Pride and W. S. Thomas may be addressed.

LITTLE FALLS, N. Y.—The board of public works is said to have awarded the contract for constructing a reservoir to Hallinan Bros. & Fenton, at $6,650. A contract was let in July to the Utica Pipe Co., Utica, N. Y., for furnishing 6,300 ft. of pipe for the proposed new works which will cost about $50,000. Supt., S. E. Babcock.

LOCKPORT, N. Y.—James Carter, Water Comr., writes us that the city water supply is secured from the Erie Canal upper level. This will be deepened this winter by the state, which will greatly interfere with the water supply for the city for this winter only. If the canal improvement is not finished this winter the commissioners may look for a spring water supply next summer. C. H. Cornes, Cy. Engr.

SIDNEY CENTER, N. Y.—Geo. W. Kendall, Stamford, N. Y., writes us that the proposed works of the Sidney Center Water Co., noted last week, will be put in by a member of the company. Press reports state that the supply will be drawn from Guilford Lake, owned by Chas. A. Winroe, for which a 50-year privilege has been granted. It is said that the company will supply Guilford, Bainbridge and Sidney, although the two latter places are already supplied by companies.

TOTTENVILLE, N. Y.—The following bids were received Sept. 27 for constructing works, as advertised in Engineering News: J. B. Newhall & Co., $25,125, awarded contract; J. L. Richardson, $26,509; Burnham & Granger, $27,544, and Hydraulic Construction Co., $28,449. It is said that besides these bids there were a large number for portions of the work. H. R. Yetman, Village Engr.; D. C. Butler, Chn. Com.

JERSEY CITY, N. J.—Bids are asked until Oct. 18 for laying and relaying about 7,500 ft. of 4 to 20-in. water pipe, and setting hydrants and valves. Geo. T. Bouton, Clk.

SALEM, N. J.—Press reports state that this place is considering the question of improving the works. Supt., C. W. Casper.

WILLIAMSPORT, MD.—A committee is said to have been appointed by the board of trade to investigate the question of water-works and an electric light plant. M. E. Cullen, Jno. H. Hoffman and P. L. Lemon are on the committee.

ROANOKE, VA.—S. B. Mosby, Gen. Mgr. and Supt. Vinton-Roanoke Water Co., writes us that the proposed extensions to the plant will cost about $25,500. The improvement will consist of repairs to the works, a new dam for an impounding reservoir, extension of mains, which will consist of 11,000 ft. of 10-in. pipe, 20,000 ft. of 8-in. pipe and 6,000 ft. of 6-in. pipe, valves, hydrants, etc. The plant cost the original owners about $35,000.

HARRISONBURG, VA.—The following bids were received by A. H. Snyder, Recdr., for furnishing the pipe and laying it from Rowley Springs, a distance of 13 miles, for a new water supply. N. Wilson Davis, Engr.:

Powhatan Brass & Iron Wks., Charlestown, W.Va.	$51,000
C. H. Eglee Co., Boston, Mass	46,290
Howard Neely, Chattanooga, Tenn.	*47,700
C. W. Snyder & Son, Dayton, Ohio	58,000
Acock & Son, Trenton, N. J.	59,067
T. L. Rosser, Jr., Charlottesville, Va	51,400
J. D. Mooney & Co., Wilkes Barre, Pa	55,005
J. C. Carpenter, Clifton Forge, Va	54,301
Ohio Pipe Co., Columbus, O.	informal
Alfred Walker, New Albany, Ind	informal

*Awarded contract for the lump sum at $47,700.

WEST UNION, W. VA.—S. P. Smith, Recdr., writes us that the town is to issue bonds for water-works. No details concerning the proposed works can be secured at this time; population, 600.

STATESVILLE, N. C.—Bids are asked until Oct. 22 for furnishing the materials and for constructing works to cost about $36,000. Des. Engr., J. L. Ludlow, Winston, N. C.; L. Harrill, Mayor.

COCHRAN, GA.—E. H. Smith writes us that the proposed works will consists of a 90 or 100-ft. tower, with a 65,000 or 75,000-gallon tank, 8 to 10-in. mains, etc.

DALTON, GA.—It is reported that the commissioners propose to extend the water mains, construct a new pumping station, a reservoir and add to the stand-pipe. Geo. W. Hamilton, Pres. Comrs.

HARMONY GROVE, GA.—W. T. Thurmond, writes us that there is no plan on foot for water-works in this place, as has been reported.

WASHINGTON, GA.—It is reported that the legislature will soon be asked to grant this place authority to issue bonds for constructing works, to cost about $35,000. Maj. C. A. Withers, Augusta, Ga., and J. W. Wilcox, Cy. Engr., of Macon, Ga., are interested.

LAKE CITY, FLA.—The plant of the Lake City Water & Light Co is reported to have been sold to J. W. Perry, J. O. Evans and Samuel Tolen, of Lake City. It is stated that the new owners will begin at once improvements to the plant.

WOODLAWN, ALA.—The Birmingham Industrial Co., Birmingham, Ala., is said to have been granted a franchise for works in this place. Geo. C. Kelley, Caldwell Bradshaw and Maclin Sloss, Birmingham, are interested.

CORINTH, MISS.—It is reported that an election will be held to vote on the question of issuing bonds for works. S. L. Ward, Cy. Clk.

BARDWELL, KY.—The construction of works and an electric light plant is proposed.

MADISONVILLE, KY.—At the election Nov. 2 this place will vote on the question of issuing $21,000 in bonds for works. It is said that the proposition will no doubt be carried. M. W. Bishop, Chn. Com.

MOUNT STERLING, KY.—A. Baum, Mayor, writes us that J. M. Roach & Co., Lexington, Ky., have been granted a franchise for works, subject to ratification at the November election. A report states that the supply will be secured from Slate or Spencer Creek. The city will take 85 hydrants at a yearly rental of $4,500.

SHELBYVILLE, KY.—James Stewart, Supt., Shelbyville Water & Light Co., writes us that the company is examining various kinds of filters with a view of putting in new ones. M. F. Rothchild, Secy.

ALLIANCE, O.—The council has decided to hold a special election to vote on the question of purchasing the works of the Alliance Water-Works Co. for $198,000. Pres., Wm. H. Runkle, 160 Broadway, New York.

AKRON, O.—The Akron Water-Works Co. has decided to extend the water mains in a number of streets. Supt. E. A. Lawton.

CALDWELL, O.—Bids are asked until Oct. 15 for the purchase of $15,000 in bonds for the proposed water-works. Work will probably soon be begun. Consult. Engr., L. E. Chapin, Canton, O.; Cyrus McGlashan, Cy. Clk.

CLEVELAND, O.—Bids are asked until Oct. 21 for furnishing a 36-in. check valve for the cast-iron water pipe. Geo. R. Warden, Dir. Pub. Wks.

COLUMBUS, O.—The city officials are considering the question of constructing a 10,000,000-gallon storage reservoir for the water supply of this city. Director of Pub. Wks. Jacobs and Mayor Black may be addressed.

ELMWOOD PLACE, O.—John H. Bart, Mayor, writes us that the proposition to lay pipes and connect with the works of St. Bernard or Carthage, will be voted upon at the election Nov. 9. A number of fire plugs, meters, valves, etc., will be used. No contracts have been let, nor bids asked for. About $15,000 will be voted for the purpose.

MOUNT GILEAD, O.—We are informed that the council on Oct. 5 authorized the mayor to call an election to be held within the next thirty days to vote on the question of issuing bonds for works; estimated cost, $48,000. Geo. J. Young, Clk.

WHARTON, O.—It is reported that this place is constructing works for fire protection.

GAS CITY, IND.—The council is said to have asked for bids for constructing works and an electric light plant; population, 4,000. Des. Engr., Jas. B. Nelson, 61 Baldwin Block, Indianapolis, Ind. R. A. Brashor, Mayor.

LAWRENCEBURG, IND.—Geo. W. Fitch, Cy. Engr., writes us that the construction of water-works and sewers will probably be considered in the spring; population, 4,284.

NEW HARMONY, IND.—Wm. Richards writes us that nothing has yet been done towards securing works. There are a number of citizens who are strongly in favor of a plant, and it is probable that in the near future a plant will be put in; population, 1,197.

MARSHALL, MICH.—This place voted Oct. 7 to issue $50,000 in bonds to purchase the water-works, noted in our issue of last week. E. H. Grant, Mayor.

NEW BUFFALO, MICH.—C. C. Hodges, Postmaster, writes us under date of Oct. 9 that an election was called to be held in two weeks hence to vote on the question of issuing bonds for works.

CHICAGO, ILL.—The Winamac Water & Light Co. has been incorporated at Chicago, to operate water-works; capital stock, $36,000; incorporators, John P. Miller, John Davis, William Habercamp.——The Cicero town board is considering a propositioln from the Cicero Water, Gas & Electric Light Co. for the purchase of the company's Oak Park plant, for $1,820,000. L. A. Norman, Chn. Township Water Com., Austin, Ill. President Traill, of the town board, may be addressed.

MILLEDGEVILLE, ILL.—S. A. Smith, Cy. Clk., writes us that the people voted Oct. 4 in favor of issuing bonds for works. Bonds for $4,000 will be sold, the city having on hand $3,000 for the works. The plant will consist of a well, a tank, a pump and engine, etc. Mains will be built as far as the amount of the issue will allow. Plans and bids for the work are wanted at once. J. F. Greenawit, Mayor.

PANA, ILL.—Bids are asked until Oct. 26 for lowering the pumps and intake pipes at the water-works. Consult. Engr., Hiram Phillips, 306 Oriel Bldg., St. Louis, Mo.; Warren Penwell, Mayor.

SPARTA, ILL.—Bids are asked by the council water-works committee for constructing works, according to reports.

WINCHESTER, ILL.—The construction of water-works is being considered; population, about 1,000.

CORRECTIONVILLE, IA.—It is reported that the council is considering bids for a stand-pipe and mains for the proposed water-works. L. P. Adams, Mayor.

ROCK VALLEY, IA.—F. E. Wade, Sheldon, Ia., has been awarded the contract for constructing works to cost about $4,720. H. Schemmer, Mayor.

BEAVER DAM, WIS.—W. G. Maxcy, Oshkosh, Wis., is reported to have purchased the water-works of this place for $70,000. The plant cost the late owners, Moffet, Hodgkins & Clarke, New York, about $125,000.

GREENWOOD, WIS.—The council has passed an ordinance authorizing the construction of works. The supply will be taken from artesian wells. It is stated that the works will be erected this fall.

WAUWATOSA, WIS.—Wm. H. Wheeler & Co., Beloit, Wis., are said to have been awarded the contract for laying the water mains for the proposed works. The bids recently received for constructing the pumping station and for furnishing the equipment, have been rejected; estimated cost, $40,000. Chas. Lapham, Engr.; Myron Gilbert, Clk.

ORTONVILLE, MINN.—S. A. Thomas, Cy. Recdr., writes us that this place, on Oct. 4, voted 142 for and 20 against issuing $15,000 in bonds for works and an electric light plant. It is probable that the improvements will be put in this fall. Des. Engr., Chas. F. Loweth, Room 12, 94 East 4th St., St. Paul, Minn.

FORT ASSINNIBOINE, MONT.—Bids are asked until Nov. 3 for constructing a steel trestle for the water tank at this fort. D. D. Wheeler, Ch. Q. M., St. Paul, Minn.

GREAT FALLS, MONT.—The committee has submitted a report in favor of the purchase by the city of the works of the Great Falls Water Co. for $340,000. If the company refuses to sell the plant at that price, the city will probably take steps toward the erection of its own plant. R. J. Fitzgerald, Chr. O. J. Wadsworth, Jr., Andrew Rinker and R. S. Ford, are on the committee.

MILAN, MO.—Wm. McClanahan, Mayor, writes us that the city voted Oct. 5 to issue $18,000 in bonds for water-works and an electric light plant. The water board will act at once regarding the letting of contracts for the works. Des. Engr., Steve Hall, Kirkville, Mo.

KANSAS CITY, MO.—The board of public works is considering the question of repairing the basins at the Quindaro reservoir, at a cost of about $3,000. It is said that 1,000 bbls. of cement and 360 cu. yds. of stone will be required. Supt., D. W. Longwell.

ST. LOUIS, MO.—The local assembly is considering a bill authorizing the purchase of a site for a new reservoir west of Grand Ave. R. E. McMath, Pres. Bd. Pub. Improvements; M. L. Holman, Water Comr.

SLATER, MO.—At the election held in this place Oct. 4 it was voted to issue $15,000 in bonds for water-works. The supply will be from an artesian well, to be pumped to a reservoir. R. L. Harvey, Mayor.

McKINNEY, TEX.—T. T. Emerson, Chn. Water Com., writes us that the proposed works will consist of 5½ miles of mains, 60 hydrants, 25 valves, a stand-pipe 110 ft. high by 14 ft. base, etc. The contract will not be let until after the test well has been completed, which will probably be about Nov. 1.

ORANGE, TEX.—This place will begin the construction of the proposed works at once, according to reports; estimated cost, $11,000. Des. Engr., John Turner Smith, Austin, Tex.; B. C. Miller, Mayor.

SHERMAN, TEX.—Burton R. Stare, Mgr. Sherman City Ry., Light & Power Co., 817 Security Bldg., St. Louis, Mo., writes us that the proposed extension to the city works, will have two 500,000-gallon triplex electric pumps. The company has only the contract for furnishing the power; population, 16,000.

VICTOR, COLO.—Rhodes Bros., Denver, Colo., are said to have been awarded the contract for laying four miles of 4-in. water pipe from the base of Pike's Peak to the Victor Saddle, at $21,100. The contractors are to take $50,000 in city bonds, returning the balance to the city, with which it will build a 70,000,000-gallon reservoir. The Vulcan Iron Works, Denver, has been awarded the contract for constructing two iron water tanks. Press reports state that the council has asked for bids for constructing the reservoir.

COLTON, CAL.—D. Johnston, Cy. Clk., writes us under date of Oct. 4 that the plans for completing the works at a cost of about $17,000, are not yet adopted. Des. Engr., J. B. Pope, San Bernardino, Cal.

ELSINORE, CAL.—The construction of works is proposed. A. W. Jamieson and C. H. Lewis, of Wildomar, Cal., and J. T. Kuhns, of Elsinore, are on the committee.

FORT BRAGG, CAL.—An election will be held Nov. 8 to vote on the question of issuing bonds for municipal works. There is a supply of about 25,000 gallons furnished the town daily by the Fort Bragg Water Co.; population, 1,000.

SAN DIEGO, CAL.—The mayor is reported as in favor of the city issuing $200,000 in bonds for building a dam and reservoir in the park. The question of the construction of the proposed municipal works, to cost about $1,500,000, will probably soon be settled. E. E. Capps, Cy. Engr.

SANTA BARBARA, CAL.—The council has decided to proceed with the construction of the proposed city works, to cost about $50,000. Bonds for this amount were sold some time ago to N. W. Harris & Co., Chicago, Ill., but the council has rescinded the order and will meet the cost of the works by a direct tax. J. K. Harrington, Cy. Engr.

GRAND FORKS, B. C.—The council is said to be considering bids for constructing the proposed works and electric light plant, to cost about $20,000. James Addison, Cy. Treas.

BIRMINGHAM, ENGLAND.—Bids are asked until Oct. 27 for constructing about nine miles of the aqueduct from Knighton. There will be two lines of 42-in. pipe, etc. Engr., Jas. Mansergh, 5 Victoria St., Westminster, London, Eng.; Edward O. Smith, Town Clk.

SEWERAGE.

CLINTON, MASS.—Plans are reported as about completed for the proposed sewer system. It is probable that sewage disposal beds will be built. J. W. Corcoran, Chn. Sewer Com.

HARTFORD, CONN.—The following bids were received by the street board Oct. 6 for constructing sewers in Westland Ave: P. H. Harrison & Sons, Newark, N. J. (accepted), $20,343; Fred. T. Ley & Co., Springfield, Mass., $23,043; R. D. Maynard, Springfield, Mass., $20,892; T. F. Maher, New Haven, Conn., $20,849; M. O'Neil, $23,499.——The following bids were also received for constructing sewers in Brown St.: P. H. Harrison & Sons, $5,547; M. O'Neil, $5,781; Hartford Paving & Construction Co., $5,882; Fred. T. Ley & Co., Springfield, $5,917.

BROOKLYN, N. Y.—Bids are asked until Oct. 19 for constructing sewers in Albany Ave.; surety, $500. T. B. Willis, Comr. Cy. Wks.

BRIDGEPORT, CONN.—It is proposed to construct sewers in certain streets.

ELIZABETH, N. J.—Bids are asked until Nov. 1 for constructing 1,870 ft. of 15 and 12-in. pipe sewers, etc. N. K. Thompson, St. Comr.

JERSEY CITY, N. J.—Bids are asked until Oct. 14 for constructing about 3,750 ft. of 48 to 24-in. brick sewers, etc. The work will include about 700 cu. yds. of rock excavation, etc. Ferd. Heintz, Chn. Street and Sewer Com.

RAHWAY, N. J.—W. E. Clark, Cy. Engr., informs us that it is proposed to build 1,700 ft. of 36-in. brick and 1,700 ft. of 15-in. pipe sewers; average cuts, 12 and 11 ft., respectively.

VAILSBURG, N. J.—Fred. T. Crane, Cy. Engr., of Orange, N. J., writes us that petitions are in circulation for a special election to authorize an issue of $30,000 in bonds to purchase an interest in the South Orange outlet sewer.

NEW KENSINGTON, PA.—Bids were asked until Oct. 12 for constructing a main sewer in 12th St. and branch sewers in 10th and other streets. W. D. Snyder, Borough Secy.

SCRANTON, PA.—The judiciary committee has decided to advise councils to borrow $100,000 for sewers recently proposed in South Scranton. W. M. Finn, C. S., and J. A. Lansing are interested.

SAVANNAH, GA.—Bids are asked until Nov. 15 for constructing a sewer system for this city, as stated in our advertising columns. The system will be 10 miles long, and will cost about $180,000. It is important for intending bidders to know that the city will not pay cash for the work, but will pay in annual installments with interest on deferred payments. The contractors who can give the best terms in this respect will have an advantage. Des. Engrs., Waring, Chapman & Farquar, 874 Broadway, New York; P. W. Meldrim, Mayor; T. S. Myll, Jr., Chn. Com.; W. J. Winn, Cy. Engr.

TAMPA, FLA.—This city will issue $300,000 in bonds for sewer, street and other improvements. J. H. Neff, Cy. Engr.

CLEVELAND, O.—Bids are asked until Oct. 28 for constructing a sewer in Woodland Ave., between Eagle and Cross Sts.; check, $1,000.——Bramley & Gribben, Cleveland, submitted the lowest bid Oct. 1 for constructing the third section of the Walworth Run sewer for about 3,000 ft., as advertised in Engineering News, at $161,290. This firm has the contract for constructing section No. 2. The contract for building the fourth or lower section is still to be let. Geo. R. Warden, Dir. Pub. Wks.

LOCKLAND, O.—The council is said to be considering estimates for a sewer system to cost about $75,000. Councilmen Frank, Bothe and Kaufman compose the committee.

MANSFIELD, O.—At the next election another vote will probably be taken on the question of issuing $75,000 in bonds for sewer extension and sewage disposal works.

SANDUSKY, O.—Bids are asked until Oct. 16 for constructing a sewer in Jackson St. R. W. Miller, Cy. Clk.

STEUBENVILLE, O.—Bids are asked until Oct. 26 for constructing 30 and 24-in. pipe sewers in two streets. Geo. P. McCracken, Cy. Clk.

TOLEDO, O.—Bids are asked until Oct. 25 for constructing 24-in. brick and 12 and 15-in. pipe sewers in four streets; until Nov. 1 for constructing 24-in. brick and 15-in. pipe sewers in six streets, and until Nov. 8 for a 60-in. brick sewer in Ash St. L. P. Harris, Cy. Clk.

FORT WAYNE, IND.—The engineer has been directed by the council to prepare plans for a mile of sewers in St. Mary's Ave.

IRVINGTON, IND.—Bids are asked until Oct. 25 for constructing a sewer in Washington St. W. C. Smith, Town Engr.

LAWRENCEBURG, IND.—Geo. W. Fitch, Cy. Engr., writes us that sewers and water-works will probably be considered in the spring.

ITHACA, MICH.—This village some months ago appointed a committee to investigate the question of sewerage and sewage disposal. It conferred with H. E. Riggs, C. E., The Nasby, Toledo, O., and last week reported favorably on the adoption of the separate system of sewerage and sewage disposal by intermittent filtration in accordance with his recommendations and plans; estimated cost, $35,000.

PONTIAC, MICH.—H. E. Riggs, Toledo, O., has completed plans for a complete system for this city. The construction of the main sewers has been completed. Next spring work will be let for several miles of lateral sewers.

DOWNERS GROVE, ILL.—A separate system of sewers, with a sewage disposal plant on the intermittent filtration system, has been recommended in a preliminary report by Alvord & Shields, The Rookery, Chicago; estimated cost, $62,000. Guy L. Bush, Pres. Board of Trustees.

MURPHYSBORO, ILL.—Bids are asked by the city clerk until Oct. 14 for constructing pipe sewers in certain streets.

PRINCETON, ILL.—Preliminary surveys for a sewer system at this place have been completed. The separate system will probably be adopted, and sewage disposal works are necessary. Des. Engrs., Alvord & Shields, The Rookery, Chicago; L. R. Davis, Chn. Com.

GREEN BAY, WIS.—H. Vernon, Chn. Sewer Com., writes us that the contract for constructing 1,200 ft. of 36-in., 5,000 of 48 and 36-in., 2,500 ft. of 60-in. brick and 7,000 ft. of 24 to 10-in. pipe sewers will be let about Nov. 12. Plans have been prepared and a resolution regarding the sewers has been passed by the councils. Engr., E. L. Shaw, Green Bay.

ST. JOSEPH, MICH.—Bids are asked until Nov. 9 for constructing 11,000 ft. of sewers, as stated in our advertising columns. L. J. McLin, Pres. Bd. Pub. Wks.; J. V. Starr, Mayor; M. Weber, Cy. Clk.

ST. LOUIS, MO.—Local papers state that Tyler Place residents will organize a company with $8,000 capital to build a 30-in. sewer to drain the district.

PASADENA, CAL.—The council has decided to postpone the special election to vote on the question of constructing a system until after a certain decision by the Supreme Court; estimated cost, $172,000. W. B. Clapp, Cy. Engr.

ST. HELENA, CAL.—Bids are asked until Nov. 9 for constructing a pipe sewer from Main St. to Kearney St. Otto Behrns, Town Clk.

MONTREAL, QUE.—Local papers state that the question of improving the drainage system of the outlying wards of the city is being considered by the city officials.

GARBAGE DISPOSAL—STREET CLEANING

READING, PA.—Bids are asked until Oct. 15 for constructing a garbage crematory complete; surety, $5,000. H. H. Hammer, Cy. Clk.

SEWICKLEY, PA.—The board of health has asked the council for an appropriation of $2,000 for a garbage furnace.

WASHINGTON, D. C.—The district commissioners this year will be allowed an appropriation of $151,000 for sweeping, sprinkling and cleaning the streets. This is an increase of $52,000 over last year's appropriation.

CLEVELAND, O.—The council has voted to award the contract for collecting, removing and destroying the garbage to the Buckeye Refuse Reduction Co. at $69,400 a year for five years and that for the night soil to A. A. Dittrich at $3.25 a ton for five years.

TOLEDO, O.—Samuel M. Jones, Mayor, writes us that this city is now considering the question of garbage collection and disposal.

CHICAGO, ILL.—Mayor Harrison last week rejected the bids recently received for collecting and disposing of the garbage for a term of five years. The bids ranged from $1,251,000 to $3,158,000. L. E. McGann, Comr. Pub. Wks.

STREETS AND ROADS.

ASHFIELD, MASS.—The following bids have been received by the Massachusetts Highway Commission, 4 Mount Vernon St., Boston, for building a section of state highway in Ashfield: Keene & Foster, Boston (accepted), $5,162; F. E. Ellis, Melrose, Mass., $7,248; M. R. Fisk, Huntington, Mass., $6,901; A. J. Wellington, Boston, $6,910; C. H. Kelliher, Newburyport, Mass., $7,178.

STURBRIDGE, MASS.—The following bids have been received by the Massachusetts Highway Commission for building a section of state highway in this town: Bowlen & Whittaker, Southbridge, Mass. (accepted), $4,300; Keene & Foster, Boston, $4,451; C. H. Kelliher, Newburyport, Mass., $4,337; A. J. Wellington, Boston, $4,554; Asa Goddard, Worcester, Mass., $4,386.

NEW HAVEN, CONN.—Bids are asked until Oct. 21 for grading and paving on "Long Hill," between Woodbridge and New Haven; bond required, $2,000. A. B. Hill, Engr., 82 Church St.

WINDHAM, CONN.—Bids are asked by the board of selectmen until Oct. 25 for grading and macadamizing a section of road between Willimantic and South Windham; bond, $1,000. E. Harlow Holmes, First Selectman; Jas. H. McDonald, Chn. State Highway Com., Hartford, Conn.

BROOKLYN, N. Y.—Bids are asked until Oct. 15 for the grading and paving with asphalt of portions of Orient Ave. and Prospect Place, and for the grading and paving with Belgian block of portions of Richardson St. and St. Nicholas Ave.; total bond required, $14,650. Theo. B. Willis, Comr. Cy. Wks.——Bids are asked by the commissioners of the common lands of the former town of Gravesend, until Oct. 18, for macadamizing Emmons and Neptune Aves., from Hog Point Creek to Ocean Parkway. Hubert L. Smith, Secy. Com., Comptroller's Office; N. P. Lewis, Engr., Dept. Cy. Wks.

MOUNT VERNON, N. Y.—Bids are asked by the council until Oct. 19 for the purchase of $40,000 of 4% highway improvement bonds. Geo. M. Jenkins, Cy. Clk.

OYSTER BAY (L. I.), N. Y.—Wm. H. Bowne, Engr., Glen Cove (L. I.), N. Y., writes us that the question of issuing bonds in this town for macadamizing highways is about settled, and it is highly probable that work will commence this fall; bids will be advertised for soon.

SYRACUSE, N. Y.—The bids received for paving East Willow St., from North Salina to Townsend St., with asphalt, asphaltina or vitrified brick were as follows: Asphaltina Construction Co., $4,592; A. S. Webb, for brick, $5,521; Warren-Scharf Asphalt Paving Co., asphalt, $4,983; Empire Construction Co., asphalt, $4,904; Columbia Construction Co., asphalt, $4,658.

JERSEY CITY, N. J.—Bids are asked by the board of street and water commissioners until Oct. 14 for the reconstruction of Pacific Ave., requiring about 4,200 sq. yds. of paving, 1,000 lin. ft. of curbing, etc.; also for the reconstruction of a portion of Pavonia Ave., requiring about 5,250 sq. yds. of paving, etc. Geo. T. Bouton, Clk.; Fred Heintze, Chn. Com.——Bids are also asked until Oct. 18 for about 2,840 sq. yds. of asphalt paving on Forrest St.; also for 2,335 sq. yds. of Belgian paving, etc., Griffith St.; also for the improvement of Columbia and Bayside Parks, requiring about 69,650 sq. ft. of granolithic or asphalt walks, etc. Geo. T. Bouton, Clk.

PASSAIC, N. J.—Bids are asked by the committee on streets until Oct. 18 for macadamizing Monroe St., from Lexington Ave. to Hamilton Ave.; work to be completed by Dec. 1; also for building a retaining wall at the foot of Hobart St. and filling the street to grade, to be completed by Nov. 1. Colin R. Wise, Cy. Surveyor.

RIVERTON, N. J.—Bids are asked until Oct. 20 for 3,000 lin. ft. of cement pavement, five feet wide, etc.; deposit required, $500. E. C. Stoughton, Mayor; F. G. Brown, Chn. Highway Com., 112 North Delaware Ave., Philadelphia, Pa.; Henry S. Haines, Borough Engr., Temple Bldg., Camden, N. J.

KENNETT SQUARE, PA—W. E. Voorhees, Secy. Council, writes us that at a recent meeting of the borough council the contract for laying a concrete gutter and for resurfacing Broad St. with broken stone was awarded to Miles, Diviney & Co., of this borough, who were the lowest bidders; other bidders were Johnson & Wickersham, Ridley Park, Pa.; and P. H. Corcoran, West Chester, Pa.

READING, PA.—Bids are asked until Oct. 14 for the curbing with granite, and the paving with asphalt, of a portion of Perkiomen Ave.; deposit required, $3,500. H. H. Hammer, Cy. Clk.; S. S. Hoff, Cy. Engr.

CINCINNATI, O.—Bids are asked until Nov. 1 for the construction and repairing of all plank and artificial stone sidewalks in the eastern and western districts of this city. August Herrmann, Pres. Bd. Administration.

FINDLAY, O.—The following bids were received Oct. 5 for paving First St.; A. W. Ray, Clk. Bd. Impvts.: Dorney & Harris, $5,121; Harry J. Hall, for Wassell block, $4,233, for blue granite, $4,438; Wm. Norris, $5,564; Wm. Edwards, for Trimble block, $4,197, for blue granite, $4,490; Henry Kob, $4,537; C. B. Metcalf, for Trimble block, $3,906, for blue granite, $4,112.

LAKEWOOD, O.—Bids are asked until Oct. 16 for grading, curbing and extending the culverts on Lake Ave., between Highland and Bell Aves. W. W. Hird, Clk. of the Hamlet.

SANDUSKY, O.—Bids are asked until Oct. 30 for the paving of Hancock St., from Scott St. to the tracks of the Baltimore & Ohio R. R.; deposit, $500. A. W. Miller, Cy. Clk.

SPRINGFIELD, O.—Bids are asked until Nov. 6 for grading and graveling on sundry streets. Samuel J. Wilkerson, Cy. Clk.; D. F. Snyder, Cy. Engr.

TOLEDO, O.—Bids are asked until Oct. 25 for paving the central 26 ft. of Sherman St., from Cherry to Kent St. Leon. P. Harris, Cy. Clk.; Wm. G. Clark, Cy. Engr.

FRANKFORT, IND.—Bids are asked until Nov. 3 for about 1,750 sq. yds. of brick paving for curbing, catch-basins, etc. A. J. Hammond, Cy. Engr., informs us that a certified check of $500 will be required.

GREENSBURG, IND.—Bids are asked until Oct. 15 for laying a sidewalk on Lathrop St. G. G. Welsh, Cy. Clk.

NEWPORT, IND.—Bids are asked until Oct. 18 for cement sidewalks. John W. Hartman, Clk.

ROCKVILLE, IND.—Bids are asked by the commissioners of Park county until Oct. 22 for grading and graveling two free gravel roads in Wabash township. One, the Terre Haute and Covington state road, is about 6 1-9 miles long and is estimated to cost $7,717; the other, the Reason, Bradfield and Rocky Run free gravel road, is about 3 miles long and will cost about $4,280. E. H. Owen, County Audr., Rockville.

DETROIT, MICH.—J. C. Oldfield, Ch. Clk. Bd. Pub. Wks., informs us that on opening bids for paving Philadelphia, Burlingame and Lawrence Aves. with asphalt the Alcatraz Paving Co. was found to be the lowest bidder, but as this company had already a large amount of paving to do, and as it was believed that the season was too for advanced for them to complete the work, which would cost about $13,000, the board concluded to postpone the paving of said avenues until next year. D. W. H. Moreland, Comr. Pub. Wks.

MARQUETTE, MICH.—The board of public works has presented its final estimate for paving Main St. to council; brick is recommended.

OWASSO, MICH.—This city has voted $35,000 in bonds for paving and the construction of several sewers. H. E. Riggs, M. Am. Soc. C. E., has been retained as engineer on this work. Brick paving on concrete foundation will be put in. Charles, Jackson, Cy. Engr.

CHICAGO, ILL.—Bids are asked until Oct. 14 for paving North Clark St., from Kinsie to Division St.; bond required, $1,000.——On Oct. 6 the board of local improvements decided to pave about 80 miles of the city streets with asphalt, brick, granite and cedar blocks, involving an expenditure of $6,000,000, the work to be done by special assessment. L. E. McGann, Comr. Pub. Wks.

CHICAGO, ILL.—Bids are asked until Oct. 20 for all the materials and labor necessary to improve portions of Albany Ave., Cornelia, Cortez, Fulton and Wells Sts.; deposit required, $1,000. L. E. McGann, Comr. Pub. Wks.

WILMETTE, ILL.—Bids are asked by the board of local improvements until Oct. 15 for the grading, curbing, paving, etc., of a part of Forest Ave. George E. Fernald, Comr.

GREAT FALLS, MONT.—Bids are asked until Oct. 15 for grading the county road on Big Otter Creek. M. S. Parker, County Clk.

KANSAS CITY, MO.—The following bids have been received for paving East Willow St., from North State to Townsend St., with asphalt, asphaltina or vitrified brick: A. S. Webb, for brick, $5,521; Warren-Scharf Asphalt Paving Co., asphalt, $4,783; Empire Construction Co., asphalt, $4,904; Columbia Construction Co., asphalt, $4,658; Asphaltina Construction Co., asphaltina, $4,592.

KANSAS CITY, MO.—Bids are asked until Oct. 16 for graded 35th St., from Indiana Ave. east. Thos. F. Callahan, County Surveyor.

ST. LOUIS, MO.—Bids are asked until Oct. 22 for grading Washington Square; deposit, $250. Robt. E. McMath, Pres. Bd. Pub. Impvts.

SPOKANE, WASH.—J. D. Farrell, of Spokane, and F. McLellan, of Minneapolis, Minn., have been awarded the contract for paving Howard St. with brick, at $11,696. W. H. Wiscombe, Comr. of Streets.

PORTLAND, ORE.—Smith & Howard were awarded the contract Sept. 27 for building the road up the west side of the river to Willamette Falls, at $4,778; other bidders were: John Burke, of Portland, $4,888; Daniel Lyons, $4,996.

BUENOS AYRES, ARGENTINA.—Consular reports from this country state that bids will be asked in the United States, England and France for paving 150 blocks in this city with asphalt.

MANUFACTURING PLANTS.

BATH, ME.—Press reports state that the Hyde Windlass Co., of this city, will build an addition to its machine works.

RUMFORD FALLS, ME.—The plant of the Rumford Falls Sulphite Co. will probably be enlarged soon.

PITTSFIELD, MASS.—The Pontoosic Woolen Mfg. Co. has let contracts for all the machinery except the engine and boiler of its new spinning mill now under construction.

NORWALK, CONN.—Plans are being prepared for alterations and additions to the Norwalk Iron Works, according to reports. Arch., W. S. Knapp, 102 Washington St., South Norwalk, Conn.

COLLEGE POINT (L. I.), N. Y.—Plans have been prepared for a 3-story brick and stone silk mill, 50 x 150 ft., to be erected in this village for William Openhym, 42 Greene St., New York; estimated cost, $20,000. Arch., Robt. D. Kohn, 96 5th Ave., New York, N. Y.

ALLENTOWN, PA.—James Nagle & Son have been awarded the contract for erecting the addition to the Palace silk mill in South Allentown, at $12,150.

NEW CASTLE, PA.—The Shiffler Bridge Co., Pittsburg, Pa., has been awarded the contract for constructing two brick and steel buildings for the new tin mill to be established near this town, at about $90,000. William Patterson, Pres. National Bank of Lawrence County, is among those interested.

PHILADELPHIA, PA.—A fire in this city destroyed the factory building of the Quaker City Morocco Co.; loss on the building, machinery, etc., about $65,000; fully insured.——William Ayres & Son will erect a new factory building.

WASHINGTON, PA.—Reports state that plans have been prepared for a brewery to be erected here for the Crescent Brewing Co., at a cost of about $40,000. Robt. H. Hallam, Mgr. Crescent Brewing Co.; L. Schrieber & Sons Co., Archs., Cincinnati, O.

PERTH AMBOY, N. J.—The separating plant of the Guggenheimer Smelting Works, near Perth Amboy, was destroyed by fire on Oct. 6, causing an estimated loss of $500,000.

COLUMBUS, GA.—Our correspondent informs us that a woolen mill will be built at this place by a company, of which John Hill is a leading promoter; the machinery will be operated by electricity.

NASHVILLE, TENN.—A fire in this city Oct. 6 destroyed the planing mill and lumber yards of John B. Ransom & Co., and the Globe Foundry & Machine Works; loss on building and machinery, $45,000; insurance, about $35,000.

CASTALIA, O.—Bids are being asked, according to reports, for the machinery and power equipment for the new cement factory to be erected here by the Castalia Cement Co., of Pittsburg, Pa., at a cost of about $175,000. Engrs., Lathbury & Speckman, 1619 Filbert St., Philadelphia, Pa.

GEORGETOWN, O.—On Oct. 4 Flinn's carriage factory was damaged by fire, also the Smith building and adjacent edifices, causing a loss of from $50,000 to $75,000; insurance, $30,000.

YOUNGSTOWN, O.—We are informed that the Shiffler Bridge Co., of Pittsburg, Pa., has been awarded the contract for erecting the new shop buildings of the Youngstown Bridge Co. The main shop will be 80 x 500 ft., with two extensions, 100 x 26 ft., for the unloading and loading of material directly into and from the shops. The forge and machine shop, together with boiler house and dynamo room, will be 60 x 180 ft. It is expected to equip the plant with electricity throughout, and to start it running in about sixty days.

KAUKAUNA, WIS.—Plans have been prepared for the Kaukauna Fibre Co. for an addition to their present plant in this city; it is said that a large amount of new machinery will also be needed. Arch., Chas. B. Pride, Appleton, Wis.

WATERLOO, IA.—Reports state that a new machine shop and foundry will soon be erected by the Waterloo Gas Engine Co., to cost about $5,000.

ATCHISON, KAN.—A fire in this city Oct. 10 destroyed the flour mill and warehouse of John M. Cain, and also the Central Mill Co.'s plant. Reported loss, $100,000; insurance about $40,000.

KANSAS CITY, KAN.—Bids are asked, according to reports, for erecting a steel foundry building, 104 x 144 ft., for the Kansas City Car & Foundry Co.; an 80-HP. boiler and engine are also to be purchased.

LOS ANGELES, CAL.—Plans have been prepared for a brewing plant to be erected in this city for the Los Angeles Brewing Co.; estimated cost, $50,000. Arch., Fred. W. Wolf & Co., 139 Rees St., Chicago, Ill.

SAN FRANCISCO, CAL.—Press reports state that the Bemis Bag Co., of Omaha, Neb., will erect a large factory building in this city next spring. M. C. Peters, Local Agent.

GAS PLANTS.

BOSTON, MASS.—The New England Gas & Coke Co. is being formed in this city to acquire the charter of the Massachusetts Pipe Line Co., and to manufacture coke and gas. It is reported that about 500 coke ovens will be constructed, and that W. L. Elkins, of Philadelphia, is among those interested.

KINGSTON, N. Y.—The Kingston Electric Co. are erecting a duplicate gas plant on Meadow St., which will have a daily capacity of about 200,000 cu. ft. of gas; estimated cost, $6,000.

PITTSBURG, PA.—Press reports state that plans are now being prepared for a new gas plant to be erected on Second Ave., adjoining that of the Pittsburg Co., for the new consolidation of gas companies, which comprises the Pittsburg, the East End, the Allegheny, the Consolidated and the South Side Cos. The old plants of the Allegheny, Lawrenceville and South Side Cos. will be abandoned.

CHICAGO, ILL.—It is reported that a new gas company, to be called the Chicago Universal Gas Co., is being organized by Emerson McMillin & Co., of New York, for the purpose of purchasing the property and franchises of the Universal Gas Co. and the Mutual Fuel Co., and thereby being able to compete with the People's Co.

COVINGTON, KY.—Mr. Hiles has introduced a resolution in the board of aldermen providing for the sale of the plant of the Covington Gas Light Co. with all the rights and privileges stated in the contract between the company and the city. It also provides that bids be asked for said plant and privileges until Oct. 25.

PALO ALTO, CAL.—Bids are asked until Nov. 20 for the purchase of a franchise to lay gas pipes along public streets of this town and to supply the people with gas; deposit required, $500. H. W. Simkins, Town Clk.

SINGAPORE, ASIA.—Bids are asked by the municipal commissioners of Singapore until Nov. 30 for the lighting of the public street lamps for five years, from Jan. 1, 1899. Address C. C. Lindsay, M. I. C. E., 167 St. Vincent St., Glasgow, Scotland. J. Polglase, Secy. Comrs. of Singapore, may also be addressed until Dec. 31.

NEW COMPANIES.—Northern Union Gas Co., New York, N. Y.; $1,500,000; to manufacture gas and electricity; J. V. H. Lawrence, Astoria (L. I.), N. Y.; Charles L. Horton and Edward S. Long, New York; I. L. Carroll and Thomas S. Smith, Brooklyn, N. Y.

Henry & MacDonald Oil Co., Sistersville, W. Va.; $250,000, all paid in; Pres., Robert L. Henry, Chicago, Ill.; 1st Vice-Pres., Charles A. MacDonald, Chicago, Ill.; 2d Vice-Pres., D. S. Henry, Chicago, Ill.; Secy. and Treas., E. J. Thompson, Sistersville, W. Va.

Acetylene Gaslight & Fuel Co., Chicago, Ill.; $1,000,000; to manufacture and sell gas in Chicago; James P. Meagher, Frederick A. Babcock, Silas H. Strawn, James Miles and Ralph Marvin Shaw.

Prink Oil & Gas Co., Weston, W. Va.; $50,000; Andrew Edmiston, A. H. Kuntz, J. H. Edwards, of Weston; J. W. Williams, Clarksburg, W. Va.; S. D. Camden, Parkersburg, W. Va.; Porter Arnold, Arnold, W. Va.

Columbia Electric Light & Gas Co., Portsmouth, Va.; $100,000; to manufacture or purchase electricity and gas, and to accumulate and store, transmit and sell electricity and gas for light, heat and power and all other uses; Pres., Charles Adamson; Secy. and Treas., William E. Stokes.

MISCELLANEOUS CONTRACTS.

TAPPING MACHINE.—Pittsfield, Mass.—The board of public works will probably soon buy a machine for tapping water pipes.

REPAIRING WALL.—Buffalo, N. Y.—Bids are asked until Oct. 21 for repairing a portion of the wall at Evans slip. R. G. Parsons, Secy. Bd. Pub. Wks.

CITY BONDS.—North Tonawanda, N. Y.—Bids are asked until Oct. 23 for the purchase of $10,000 of 5% city market bonds. A. E. McKeen, Mayor; H. M. Slocum, Treas.

RIVER IMPROVEMENTS.—Liverpool, England.—American papers state that the Mersey Docks & Harbor Board proposes to make important improvements to the Mersey River.

BANK REVETMENT.—St. Louis, Mo.—Bids are asked until Oct. 22 for bank revetment work at the Chain of Rocks; deposit, $1,325. R. E. McMath, Pres. Bd. Administration.

REBUILDING WHARF.—Vallejo, Cal.—Village Trustee M. R. Aden is reported as having plans prepared for rebuilding and improving the wharf at Virginia St., at a cost of about $8,000.

LANTERNS.—Washington, D. C.—Bids are asked until Nov. 1 for furnishing 25 aluminum signal lanterns for the signal service. A. W. Greeley, Ch. Signal Officer, War Dept., Washington.

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For Other Proposals see Page XXIV.

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

Sealed bids addressed to the Board of Trustees of the Sanitary District of Chicago will be received by the Clerk of the Sanitary District at Room 1110 Security Building, Chicago, Illinois, up to 12 m. (standard time) of Wednesday, November 10th, 1897, and will be publicly opened by the said Board of Trustees at the regular meeting held that day or at a special meeting called for that purpose.

The work for which said tenders are invited is:

First—The excavation of a channel, designated as "The Tail Race," and the building of the embankments, masonry core, highway approaches and all collateral work necessary or incident to the said tail race, as described and specified in the detail specifications furnished by the engineer.

Second—The construction of a "Weir Dam" of masonry, and the work collateral thereto, as described in the detailed specifications furnished by the engineer.

Each bidder may make alterative propositions, one upon the basis of his being awarded both divisions of the work, and one for each division of the work, independent of the other, and the Board of Trustees may award all the work to one bidder, or may award the tail race to one bidder and the weir dam to another, reserving the right, however, to reject any and all bids.

A certified check or cash to the amount of three thousand dollars ($3,000) must be deposited with the bid for each division of the work, but two such checks or deposits will be accepted as covering the entire work on the basis of alternative propositions. All certified checks must be drawn on some responsible bank doing business in the City of Chicago, and be made payable to the order of the Clerk of the Sanitary District of Chicago. Said amount of three thousand dollars ($3,000) for each division of the work will be held by the Sanitary District until all of said bids have been canvassed and the contract awarded and signed, the return of said check or cash being conditioned upon any bidder to whom the award of said work may be made appearing within ten (10) days after notice of such award being given, with bondsmen, and executing a contract with the Sanitary District for the work so awarded, and giving a bond satisfactory to the said Board of Trustees for the fulfillment of the same in the amount of sixty thousand dollars ($60,000) for the tail race and fifteen thousand dollars ($15,000) for the weir dam.

All bids must be made upon blank forms furnished by the Sanitary District, and must give the price for each separate class of work or material called for by the specifications.

The bids will be compared on the basis of the prices bid per cubic yard applied to the Engineer's approximate estimate of quantities added to the lump sum price for any portion of the work upon which a lump sum may be asked.

No bid will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his ability and experience in this class of work, and that he can control sufficient capital to enable him successfully to prosecute same in case the contract therefor shall be awarded him.

Bidders are required to state in their bids their individual names and places of residence in full.

Specifications and plans may be seen at the office of the Chief Engineer, Room 1010 Security Building, Chicago, Illinois.

The said Board of Trustees reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO,
By THOS. KELLY,
President of its Board of Trustees.
Attest:
JAS. REDDICK, Clerk.
Chicago, September 6, 1897. 40-4t

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

Sealed proposals addressed to the Board of Trustees of the Sanitary District of Chicago and indorsed:

"Proposals for supplying and erecting certain bridge substructures along the line of the main drainage channel" will be received by the Clerk of the said Sanitary District at Room 1,110 Security Building, Chicago, Ill., until 12 m. (standard time) of Wednesday, the 3d day of November, A. D. 1897, and will be publicly opened by said Board of Trustees at the regular meeting held that day, or at a special meeting held for that purpose.

The bridges for which said tenders are invited are two in number, and their sites are as follows:

Pittsburg, Cincinnati, Chicago and St. Louis Railway Company, Chicago and Northern Pacific Railroad Company, and the Union Stock Yards and Transit Company's bridge on Contract Section O, near Campbell Avenue.

Kedzie Avenue bridge on Section N.

The work for which said tenders are invited includes the supplying of all materials for the substructures of said bridges, and the erection and completion of the same, according to plans and specifications furnished by the Sanitary District of Chicago, unless a competitive plan submitted shall prove, in the opinion of the Chief Engineer of said district, more acceptable and economical. Competitive plans, accompanied by bids formed upon such plans, are solicited.

Such plans must conform to the specifications furnished by the district as to strength and quality of materials and workmanship. All competitive plans must be accompanied by a certificate from the interested railroad that the design, if adopted by the district, will be acceptable to such railroad company.

Each bridge will be treated as a single contract in canvassing proposals and making awards.

Bids for the P., C., C & St. L. Ry. Co., C. & N. P. R. R. Co., and U. S. Y. & T. Ry. Co.'s bridge must be accompanied by certified check or cash to the amount of three thousand ($3,000) dollars.

The bids for Kedzie Avenue bridge must be accompanied by a certified check or cash to the amount of one thousand ($1,000) dollars.

All certified checks must be drawn on some responsible bank doing business in the City of Chicago and be made payable to the order of the Clerk of the Sanitary District of Chicago. Said amounts of three thousand ($3,000) or one thousand ($1,000) dollars, respectively, will be held by the Sanitary District until all said bids have been canvassed and the contracts awarded and signed, and return of said check or cash being conditioned upon any bidder to whom the award of said work may be made appearing within ten (10) days after notice of such award being given, with bondsmen, and executing a contract with the Sanitary District for the work so awarded, and giving a bond satisfactory to the said Board of Trustees for the fulfillment of the contract for the substructure of the P., C., C. & St. L. Ry. Co., the C. & N. P. R. R. Co. and the U. S. Y. & T. Co.'s bridge in the amount of thirty thousand ($30,000) dollars, and of the contract for the substructure of Kedzie Avenue bridge in the amount of five thousand ($5,000) dollars

All bids must be upon the blank forms furnished by the Sanitary District.

No bid will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his experience and ability in this class of work, and that he can control sufficient capital to enable him successfully to prosecute same in case the contract therefor shall be awarded him.

Bidders are required to state in their bids their individual names and places of residence in full.

Specifications and plans may be obtained at the office of the Chief Engineer, Room 1,010 Security Building, Chicago, Ill., on and after Oct. 13, 1897.

The said Board of Trustees reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO,
By THOMAS KELLY,
President of Its Board of Trustees.
Attest: JAMES REDDICK, Clerk.
Chicago, Sept. 2, 1897. 39-4t

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

Sealed proposals addressed to the Board of Trustees of the Sanitary District of Chicago and indorsed:

"Proposals for supplying and erecting certain bridge superstructures along the line of the main drainage channel" will be received by the Clerk of the said Sanitary District at Room 1,110 Security Building, Chicago, Ill., until 12 m. (standard time) of Wednesday, the 3d day of November, A. D. 1897, and will be publicly opened by said Board of Trustees at the regular meeting held that day, or at a special meeting held for that purpose.

The bridges for which said tenders are invited are two in number, and their sites are as follows:

Chicago, Madison and Northern railroad bridge, near east end of Contract Section N.

Chicago and Calumet Terminal railway bridge, near west end of Contract Section E.

The work for which said tenders are invited includes the supplying of all materials for the superstructures of said bridges, and the erection and completion of the same, according to plans and specifications furnished by the Sanitary District of Chicago, unless a competitive plan submitted shall prove, in the opinion of the Chief Engineer of said district, more acceptable and economical. Competitive plans, accompanied by bids formed upon such plans, are solicited.

Such plans must conform to the specifications furnished by the district as to strength and quality of materials and workmanship. All competitive plans must be accompanied by a certificate from the interested railroad that the design, if adopted by the district, will be acceptable to such railroad company.

Each bridge will be treated as a single contract in canvassing proposals and making awards.

Each bid must be accompanied by a certified check or cash to the amount of three thousand ($3,000) dollars. All certified checks must be drawn on some responsible bank doing business in the City of Chicago, and be made payable to the order of the Clerk of the Sanitary District of Chicago. Said amount of three thousand ($3,000) dollars will be held by the Sanitary District until all of said bids have been canvassed and the contract awarded and signed, the return of said check or cash being conditioned upon any bidder to whom the award of said work may be made, appearing within ten (10) days after notice of such award being given, with bondsmen, and executing a contract with the Sanitary District for the work so awarded, and giving a bond satisfactory to the said Board of Trustees for the fulfillment of the contract for the superstructure of the Chicago, Northern Railroad bridge in the amount of twenty thousand ($20,000) dollars, and of the contract for the superstructure of the Chicago & Calumet Terminal Railway bridge in the amount of fifteen thousand ($15,000) dollars.

All bids must be upon the blank forms furnished by the Sanitary District.

No bid will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his experience and ability in this class of work, and that he can control sufficient capital to enable him successfully to prosecute same in case the contract therefor shall be awarded him.

Bidders are required to state in their bids their individual names and places of residence in full.

Specifications and plans may be obtained at the office of the Chief Engineer, Room 1,010 Security Building, Chicago, Ill., on and after Oct. 13, 1897.

The said Board of Trustees reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO,
By THOMAS KELLY,
President of Its Board of Trustees.
Attest: JAMES REDDICK, Clerk.
Chicago, Sept. 2, 1897. 39-4t

ELECTRIC LIGHT FRANCHISE

SOMERSET, KY.

Notice is hereby given that the City of Somerset, in the City Hall, in Somerset, Ky., at about the hour of 10 o'clock a. m., on the 13th day of December, 1897, will publicly receive bids for the sale of a franchise, for the term of twenty (20) years, to light the streets of said city by means of electricity, and to furnish commercial lights by electricity to the citizens thereof.

Said franchise will be awarded to the highest and best bidder, the right to reject any and all bids being reserved.

Full information can be had by application to the Mayor or City Clerk:

This September 1st, 1897.

F. R. GRIFFIN,
Mayor.
JNO. H. WHEELOCK,
City Clerk. 40-2t

Commonwealth of Massachusetts.

HARBOR AND LAND COMMISSIONERS' OFFICE,
ROOM 131, STATE HOUSE,
BOSTON, October 1, 1897.

Sealed bids or proposals endorsed "Proposals for Building Pier on South Boston Flats" will be received by the Board of Harbor and Land Commissioners, Room 131, State House, Boston, Mass., until 12 o'clock noon of Thursday, October 28, 1897, and then and there will be publicly opened and read.

All proposals must be made upon a blank form which, with plans and specifications, may be found at the office of the Board, and will be required to be in a gross sum for the entire work.

Each bidder will be required to give to the Board satisfactory assurance of his competency, experience and responsibility.

Each bid is to be accompanied by a certified check for one thousand ($1,000) dollars, payable to the Commonwealth of Massachusetts, such check to be returned to the bidder unless forfeited under the condition herein stipulated. This check should not be enclosed in the sealed envelope containing the bid, but should be delivered to the Secretary of the Board, from whom a proper voucher will be received.

A bond will be required for the faithful performance of the contract, in the sum of Twenty-five Thousand ($25,000) dollars, with sureties satisfactory to the Board.

The person to whom the contract shall be awarded will be required to offer his surety and to execute the contract and furnish the bond within ten (10) days (not including Sundays) from the date of notice that the contract is ready for signature, and in case of failure or neglect so to do, will be deemed to have abandoned it, and the check accompanying the proposal shall be forfeited to the Commonwealth.

The right is reserved to reject any and all bids and to waive any defect or informality at the discretion of the Board.

WOODWARD EMERY,
CHAS. H. HOWLAND,
CLINTON WHITE,
40-2t Harbor and Land Commissioners.

GUN FORGINGS.—Washington, D. C.—Bids are asked until Oct. 18 for furnishing 30 sets of rough bored and turned forgings for 4-in. breech loading rapid-fire guns. J. D. Long, Secy. Navy Dept.

PIERS.—Philadelphia, Pa.—The department of public works will probably soon ask for bids for constructing three new piers at Arch, Race and Chestnut Sts., according to local papers. Thos. M. Thompson, Dir.

EXCAVATION AND MASONRY.—Gloversville, N. Y.—Bids are asked by J. Leroy Burr, Clk., Gloversville, for 150,000 cu. yds. of earth excavation and 5,000 cu. yds. of rubble masonry, as stated in our advertising columns.

PIER AND DOCK.—Cincinnati, O.—Manufacturers along the Lake Shore tracks have taken up a project for the establishment of a pier and docks at the foot of Wilson Ave., by the city. It is thought that a dock at this point would bring a great deal of business to that section of the city.

DRY DOCK.—Perth Amboy, N. J.—The Raritan Dry Dock Co. is said to be building a large dry dock at this place, which, when completed, will raise a vessel weighing 2,000 tons. The new dock will be built at the old works of the United Refiners' Oil Co., which have been abandoned for some time.

GRAVING DOCK.—Bristol, England.—Press reports state that the municipality of this city proposes to construct a new dock, which will occupy an area of 40 acres, and also a large graving dock and grain sheds, the works to cost about $7,500,000. Parliamentary authorization for the improvements will be sought at the next session.

STEEL BARGES.—St. Louis, Mo.—It is reported that the stockholders of the Consolidated Elevator Co. have decided to organize the St. Louis & New Orleans Barge Line Co., with a capital stock of $250,000, to build steel barges of light draught, in which it is expected grain can be shipped to New Orleans for 3 cts. a bushel. Web Samuel, Gen. Mgr.

HARBOR IMPROVEMENTS.—Gray's Harbor, Wash.—Press reports state that the war department has directed the readvertisement for bids for building a stone pier and doing other work at Gray's Harbor. The original advertisement, although within the appropriation of $520,000 to $600,000, failed to bring the suitable kind of stone. Since that time the department has been informed that good stone has been found near at hand.

PIER.—New York, N. Y.—Bids are asked until Oct. 14 for constructing a pier at Bethune St. and the North River. The work will include 1,700,000 ft., B. M., of yellow pine timber, to be furnished by the department, and 52,000 ft., B. M., of yellow pine and white oak timber, 3,380 piles, 240,000 lbs. of nails, bolts, nuts, spikes, etc.; 7,544 lbs. of boiler plate armatures, 382,512 lbs. of plate girders, beams, etc. Geo. S. Terry, Secy. Dock Dept., Pier A.

PRACTICE SHIP.—Washington, D. C.—Press reports state as follows: The navy department has advertised for bids for the construction of a practice ship for the cadets at Annapolis. It will be bark-rigged, with 1,100 tons displacement, 175 ft. long, 27 ft. in breadth, with a draft of 16½ ft. Its motive power will be entirely of sail, but will be equipped with steam engines for steering, dynamos and condensers. It will carry an assortment of rapid-fire guns and be equipped in every way for a practice ship.

DRAINAGE CHANNEL.—Chicago, Ill.—An election has been called for Nov. 2 to be held in Calumet to vote on the question of constructing a new drainage channel in that district. The proposed sanitary district covers a large territory and involves the expenditure of from $4,000,000 to $7,000,000 in the construction of a canal to connect the Calumet River with the Chicago drainage channel at Sag. The result to be obtained is to turn all the sewage now flowing from the Calumet River from Lake Michigan to the drainage channel. The district as proposed in the petition includes all of Hyde Park south of 87th St. and all the townships drained by the Calumet.

SUBWAY.—Boston, Mass.—Bids are asked until Oct. 28 for constructing Section 11 of the subway under and near the site of the old Boston & Maine Ry. station at Haymarket Square. A portion of the subway will be an open incline, with concrete and granite side walls, and the remaining portion will be covered. The covered structure will consist of a combination of steel and masonry. Some of the items are estimated to be as follows: 14,000 cu. yds. earth excavation; 210 tons iron and steel, furnished by commission, to be set in place; 6,000 cu. yds. concrete, stone and brick masonry; 22,000 lin. ft. of piles in place. Geo. C. Crocker, Chn. Boston Transit Comn., 20 Beacon St.; H. A. Carson, Ch. Engr.; B. Leighton Beal, Secy.

STEEL BARGE.—Cleveland, O.—Local papers state as follows: Pickands, Mather & Co. announced last week that they will manage a steel tow barge to be built by the American Steel Barge Co. during the winter. The vessel, which will be 378 ft. long, 46 ft. beam and 26 ft. deep, will be ready for service next spring. The decision of the American Steel Barge Co. to build another barge on its own account makes the number of vessels under contract twelve, with positive assurance of several more. Designs for a steel freight steamer prepared by F. W. Wheeler & Co., convey an idea of the vessels of the near future. The Bay City shipbuilders present plans to the Cleveland-Cliffs Iron Co. for a vessel 500 ft. long, with 50 ft. beam and 28 ft. deep. A boat of this size would be 50 ft. larger than the big ship to be constructed by the Cleveland Shipbuilding Co. for A. B. Wolvin, of Duluth. The shipyards are now conducting negotiations.

CONTRACT PRICES.

MACADAM ROAD.—Ashfield, Mass.—We are informed that the following bids were received Oct. 7 by the state highway commissioner, Boston, for building a macadam road in Ashfield, Mass.; contract awarded Keene & Foster, of Boston:

Quantities.	F. E. Ellis, Melrose, Mass.	M. R. Fiske, Huntington, Mass.	Keene & Foster, Boston, Mass.	A. J. Wellington, Boston.	C. H. Kelleher, Newburyport.
Excavation 15,200 cu. yds.	$0.30	$0.30	$0.19	$0.28	$0.30
Borrow . 2,450 " "	.45	.35	.25	.30	.40
Rubble masonry:					
Laid dry 258 " "	3.00	2.50	2.50	4.00	3.00
In cemt 36 " "	5.00	5.00	6.50	6.00	6.00
Vit. c. pipe. 215 lin. ft..	.65	.65	.70	.60	.60
Fencing[1] .. 3,000 " "	.15	.15	.18	.15	.15
Finishing[2] .... Labor, hr.	.20	.15	.20	.20	.18
Finishing[2] .... D. teams.	.50	.40	.50	.50	.50
Finishing[2] .... S. teams.	.35	.30	.35	.35	.30
Stne mnmts 46 each...	2.00	1.50	2.00	2.00	1.50
Total	$7,298	$6,901	$5,162	$6,910	$7,178

[1]Used as guard rail. [2]Between limits.

BLOCK PAVING.—Allegheney, Pa.—Sloane, McIlvain & Ott Bros. have been awarded the following contract for block paving in Old Franklin Road: About 11,000 cu. yds. excavation, 23 cts. a cu. yd.; 2,800 sq. yds. Ligonier block paving, $1.75 a sq. yd.; 1,800 sq. yds. brick sidewalk, 60 cts. a sq. yd.; 2,000 lin. ft. of curbing, 60 cts. a lin. ft.; 500 lin. ft. of granite crossing, 60 cts. a lin. ft.; total, $10,010.

BRICK SEWERS.—Quincy, Mass.—The following bids were received Oct. 7 for constructing section 2 of the sewer system, as advertised in Engineering News; E. W. Branch, Engr. Sewer Dept.:

Bids Received at Quincy, Mass., Oct. 7 for Constructing Section 2 of the Sewer System.

Bidder.	Excavation and refill sewer: Brick, 1,655 lin.ft.	Pipe, 1,050 lin.ft.	Rock, 50 cu.yds.	Masonry: Brick, 325 cu.yds.	Concrete, 550 cu.yds.	Laying pipe for chimneys, 100 lin.ft.	Lumber in place, 10 M. ft., B.M.	Block paving around manholes, 25 sq.yds.	Laying 24-in. pipe, 1,050 lin.ft.	Total.
C. A. & C. E. Trumbull, Boston	$3.45	$3.45	$4.00	$5.50	$4.50	$0.10	$40.00	$5.00	$0.25	$14,592
Wm. Cashman, W. Quincy, Mass. ..	3.33	3.33	5.00	5.00	4.00	.20	35.00	1.50	.25	13,753
W. H. Sherman, Providence, R. I...	3.50	3.00	2.00	4.50	4.50	.25	35.00	.60	.25	13,633
G. L. Myrick & Co., Malden, Mass..	3.10	3.10	4.00	5.00	4.00	.20	35.00	3.00	.25	13,118
Chas. G. Craib, Boston, Mass.....	3.00	3.00	5.00	5.00	4.00	.12	30.00	2.00	.25	12,815
T. H. & G. M. Bryne, Hyde Park...	1.49	1.49	4.00	14.00	4.50	.10	30.00	2.00	.20	11,825
Long & Little, Leominster, Mass....	1.70	1.70	5.00	4.75	5.00	.15	45.00	1.25	.50	10,164
J. Sheehan & Co., Lynn, Mass.	1.90	1.80	3.50	5.25	4.25	.10	30.00	.25	.50	10,095
Jos. M. Bagley, New York, N. Y....	1.30	1.20	3.50	9.70	5.00	.05	25.00	2.00	.20	10,004
C. C. McGrew & Co., Boston, Mass..	2.25	2.25	3.50	3.25	2.50	.10	16.00	2.00	.15	9,070
H. A. Hanscomb & Co., W. Medford	1.49	1.40	4.00	4.50	4.50	.10	30.00	1.50	.20	8,631
J. H. McKnight, Hyde Park, Mass..	1.45	1.27	3.25	3.00	4.00	.20	20.00	2.50	.24	7,898

STONE ROAD.—Sturbridge, Mass.—The state highway commission, Boston, received the following bids Oct. 7 for building a stone road in Sturbridge; contract awarded to Bowler & Whittaker, of Southbridge:

Quantities.	Keene & Foster, Boston, Mass.	C. H. Kelleher, Newburyport.	A. J. Wellington, Boston.	A. Goddard, Worcester, Mass.	Bowler & Whittaker, Southb'dge.
Excavation . 100 cu. yds.	$0.35	$0.50	$0.30	$0.40	$0.35
Borrow ... 375 " "	.35	.35	.30	.40	.35
Ledge .... 50 " "	1.75	2.00	3.00	2.00	1.75
Rubble masonry:					
Laid dry . 48 " "	2.75	4.00	4.00	3.00	3.00
In cemt. 37 " "	5.50	6.00	6.00	6.00	4.50
Gravel .... 375 " "	.75	.55	.60	.75	.60
Shaping .... 7,225 sq. yds.	.02	.02	.02	.02	.02
Telford .... 50 " "	.45	.60	.40	.30	.35
Brkn stone.. 1,860 tons....	1.33	1.35	1.35	1.30	1.35
Vit. cl. pipe 150 lin. ft..	.60	.50	.60	.65	.60
Fencing[1] ... 300 " "	.14	.20	.15	.20	.16
Side drains 1,970 " "	.40	.30	.40	.35	.35
Finishing[2] .... Labor, hr.	.20	.175	.20	.20	.18
Finishing[2] .... D. teams.	.50	.50	.50	.45	.45
Finishing[2] .... S. teams.	.35	.30	.35	.35	.35
Stone mnmts 16 each...	1.25	1.50	1.50	1.50	1.25
Total	$4,451	$4,337	$4,554	$4,386	$4,310

[1]Used as guard rail. [2]Between limits.

ELECTRIC LIGHTING.—Philadelphia, Pa.—Local papers state as follows regarding the bids received Oct. 11 for lighting this city during 1898: All of the companies furnished bids for lighting the territory they now cover, but the Kensington company, which sent no bid. The Kensington company has 325 lights in the 18th and 31st Wards, its price for last year being 35 cts. a light per night. The companies that furnished bids have 6,661 lights, for which they will receive during the present year $808,506. At the figures given in the estimates furnished Oct. 11 the lights will cost $790,913, a saving of $17,593. The bids with the number of lights and the cost a night of each light, together with the price now paid, is as follows:

Companies.	Number of lights.	A light a night.	A night in 1897.
Southern.....	566	$0.32½	$0.33½
Southern	503	0.32	0.33
Southern.....	164	0.30	0.31
Powelton.....	666	0.32	0.32½
Powelton.....	30	0.30	0.30½
Germantown.....	219	0.37	0.37
Wissahickon.....	189	0.35	0.37
Suburban.....	543	0.37	0.37
Diamond.....	432	0.33	0.33
Diamond.....	80	0.30	0.31
Manufacturers	482	0.33	0.33
Manufacturers.....	30	0.30	0.31
Brush.....	379	0.30	0.32½
Brush.....	2,171	0.31½	0.31
Brush.....	207	0.34	0.35

The total number of electric street lights at present is 6,986, which is 750 more than at the beginning of the present year.

SEWERS.—Quincy, Mass.—E. W. Branch, Engr. Sewer Dept., informs us that the following bids were received Oct. 7 for constructing section 3 of the sewer system, as advertised in Engineering News:

Bids Received at Quincy, Mass., Oct. 7 for Constructing Section 3 of the Sewer System.

Bidder.	Excavtn and refill brick sewer, 3,100 lin. ft.	Rock excavation, 50 cu. yds.	Masonry: Brick, 630 cu. yds.	Concrete, 700 cu. yds.	Laying pipe for chmnys, 600 lin. ft.	Lumber in place, 10 M. ft. B. M.	Blk pvg around mnhls, 25 sq. yds.	Total.
E. W. Everson, Providence, R. I.....	$8.60	$2.00	$4.50	$4.50	$0.25	$35.00	$0.60	$33,200
C. A. & C. E. Trumbull, Boston, Mass...	7.90	4.00	5.50	4.50	.10	40.00	5.00	31,860
T. H. & G. M. Bryne, Hyde Park, Mass.	7.00	.10	5.50	4.50	.10	35.00	2.00	28,780
John Cashman, Quincy, Mass.	7.00	1.00	5.25	4.00	.20	25.00	2.00	28,278
Long & Little, Leominster, Mass.	5.50	8.00	5.75	6.00	.20	45.00	1.25	25,874
Chas. G. Craib, Boston, Mass.	6.00	4.00	5.00	4.00	.12	30.00	2.00	25,172
John Sheehan & Co., Lynn, Mass.	4.00	4.00	5.00	4.25	.15	30.00	.30	19,123

STEEL RAILS.—Philadelphia, Pa.—Press reports state as follows: The Pennsylvania R. R. Co. has purchased 40,000 tons of steel rails at $19 a ton for 30-ft. rails and $20 for 60-ft. rails. The contracts were awarded to the Pennsylvania Steel Co., the Cambria Iron Co. and the Carnegie Steel Co. All the rails are to be delivered before Jan. 1, 1898. The new rails are to be used for double-tracking the Atlantic City division of the West Jersey & Seashore R. R., and replacing old and lighter rails on other portions of the Pennsylvania Eastern lines. Contracts are also to be let for new rails for the Western lines, in which the Illinois Steel Co. will participate.

CEMENT SIDEWALKS.—Washington, D. C.—The Cranford Paving Co. has been awarded the contract for making repairs to cement sidewalks at the following prices: Five square yards or less, $2.25 a sq. yd.; five to ten square yards, $1.80 a yd.; any area in excess of 10 sq. yds., $1.30 a sq.yd. It is stipulated that the work shall be colored to conform to that of the old pavement.

RELIEF SEWER.—Brooklyn, N. Y.—The following bids were received by T. B. Willis, Comr. Cy. Wks., Oct. 5, for constructing a relief sewer for Bond St. and adjacent streets: Charles Hart, through center of 72-in. brick sewer, a lin. ft., $11; through center of 60-in. brick sewer, a lin. ft., $6.60; through center of 42-in. brick sewer, a lin. ft., $10; each manhole, complete, $30; each street basin, complete, $100; overflow connection A, complete, $500; for overflow connection B, complete, $500; each cubic yard of concrete in place, $4; each lineal foot of piles furnished and driven in place, 15 cts.; each cu. yd. of earth filling, measured in place, 35 cts.; each 1,000 ft. B. M., foundation plank, $23; each 1,000 ft. pile capping, B. M., $23; lowest bidder, total, $20,684; Daniel J. Creem, through center of 72-in. brick sewer, $10.50; through center of 60-in. brick sewer, $6.50; through center of 42-in. brick sewer, $9; each manhole, complete, $20; each street basin, complete, $100; for overflow connection A, complete, $770; for overflow connection B, complete, $570; each cubic yard of concrete, in place, $2.25; each lineal foot of piles furnished and driven in place, 10 cts.; each cubic yard of earth filling, measured in place, 35 cts.; each 1,000 ft., B. M., foundation plank, $17; (M) each 100 ft. pile capping, B. M., $25.

SEWERS.—Fort Madison, La.—The Fort Madison Construction Co. has been awarded the contract as follows for constructing sewers in two streets: For 10-in. pipe in alley sewer, 20 cts. a lin. ft.; on Maple St., 24-in. pipe, 35 cts. a ft.; 10-in. 10 cts. a ft.; 12-in., 10 cts. a ft.; manholes, $27 each.

BRICK SEWER.—Allegheny, Pa.—The councils awarded the following contract Oct. 6 to Harvey Sloan for constructing a brick sewer along Jackson Run: 1,950 ft. of 7-ft. brick sewer, $8.50 a ft.; 2,000 ft. of 4-ft. brick sewer, $4.75 a ft.; 100 cu. yds. masonry, $9.75 a cu. yd.; 2 No. 1 inlets, $30 each, and 11 manhole shafts, $20 each; total, $27,330. Chas. Geyer, Mayor; Robt. Dilworth, Cy. Clk.

WATER PIPE.—Chicago, Ill.—L. E. McGann, Comr. Pub. Wks., is reported to have received the following bids Sept. 28 for furnishing about 34,000 tons of 6 and 48-in. cast-iron water pipe: J. B. Clow & Sons, Chicago, 6-in. pipe, $17.88 a ton, 8-in. pipe, $17.87 a ton, 12-in. pipe, $17.86 a ton, 16-in. pipe, $17.85 a ton, 24-in. pipe, $17.84 a ton; Addyston Pipe & Steel Co., Cincinnati, O., $16.93 a ton for any size pipe; combined bids of the Chattanooga (Tenn.) Pipe Works and Dennis Long & Co., Louisville, Ky., $16.97 for any size pipe; Michigan Peninsular Car Co., Detroit, Mich., 6 to 12-in. pipe, inclusive, $18.85 a ton, 30 and 36-in. pipe, $19.25 a ton; Ohio Pipe Co., Columbus, 24-in. pipe, $17.47 a ton; South Pittsburg (Tenn.) Pipe Works, $16.89 a ton for 6 to 12-in. pipe, inclusive; McNeal Pipe & Foundry Co., Burlington, N. J., $23 a ton for all sizes.

BRICK PAVING.—Hagerstown, Md.—Edward G. Buck, Bedford City, Va., has been awarded the contract for 5,850 sq. yds. of brick paving in West Washington St. at $1.29 a sq. yd., cement filler.

STONE ROAD.—Brookfield, Mass.—Twichell & O'Gara, Spencer, Mass., are said to have been awarded the following contract for building a stone road at this place: Earth excavation, 35 cts. a cu. yd.; rubble masonry, $3 a cu. yd.; cement masonry, $6 a cu. yd.; broken stone in place, $1.70 a ton; railing, 75 cts. a ft.; gravel, 50 cts. a cu. yd. The contract also calls for the contractors to employ Brookfield help as far as possible on the following basis: For two-horse teams, 40 cts. an hour; for single teams, 30 cts.; for a day laborer, 17½ cts. an hour.

ASPHALT PAVING.—Trenton, N. J.—The following bids were received by the council Oct. 5 for asphalt paving in South Clinton Ave.: Barber Asphalt & Paving Co., 5-year guarantee, $1.87; ten-year, $2.20; 15-year, $2.60; new curb, 30 cts.; old curb, 3 cts.; granite blocks, 9 cts.; Richardson & Ross, $1.30, $1.60, $1.90, 55 cts., 8 cts., 40 cts., respectively; Pennsylvania Coal & Construction Company, $1.20, $1.50, $1.80, 37 cts., 4 cts., 30 cts., respectively; California Asphalt Co., $1.90, $2.24, $2.64, 30 cts., 4 cts., 10 cts., respectively; Metropolitan Asphalt Co., $1.93, $2.23, $2.68, 35 cts., 5 cts., 13 cts., respectively; William F. McGovern, $1.90, $2.20, $2.60, 35 cts., 3 cts., 5 cts., respectively.

ASPHALT PAVING.—Toledo, O.—F. E. Cole has been awarded the contract for Trinidad asphalt paving in Virginia St., between Collingwood and Lawrence Aves., at $1.89 a sq. yd.; total $12,487. The asphalt will be 2½ ins. deep laid on a 6-in. concrete foundation.

PAVING.—Louisville, Ky.—The board of public works received the following lowest bids for paving: Transit Ave., from the Bardstown Road to Everett Ave., Stengel & Bickel, $6 a square of 100 sq. ft. of macadam; Daisey Lane, from Wilson Lane to Glen Mary Ave., and Daisy Lane, 150 ft. southeast of Glen Mary Ave., J. R. Gleason,

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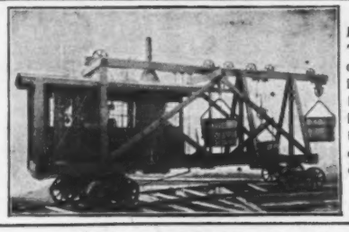

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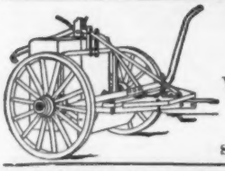

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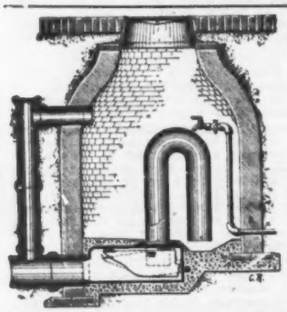

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SEWERAGE SYSTEM.

SAVANNAH, GEORGIA.

Sealed proposals for constructing a complete system of sewerage in the City of Savannah, Georgia, will be received by the Committee on Drainage until 12 o'clock noon, Eastern time, November 15th, 1897. The right to reject any or all bids is reserved.

The work will consist approximately of forty miles of pipe sewers with all necessary appurtenances. Completer plans and specifications are now in course of preparation, and will be ready for inspection by contractors proposing to bid for the work, at 12 o'clock noon, Eastern Time, November 1st, 1897, at the office of the City Engineer, Savannah, Georgia. Address

COMMITTEE ON DRAINAGE,
Care Clerk of Council,
41-5t Savannah, Ga.

SEWERS

ST. JOSEPH, MICH.

Sealed proposals will be received by the Board of Public Works of the City of St. Joseph, Michigan, until 2 p. m., November 9th, 1897, for the construction of about eleven thousand (11,000) lineal feet of sewer.

Plans and specifications can be seen at the office of the City Clerk of St. Joseph, Michigan, or at the office of the consulting engineer, A. V. Powell, Room 615 Chamber of Commerce, Chicago, Ill.

L. I. McLIN,
Pres. Board of Public Works,
41-1t St. Joseph, Michigan.

EARTH EXCAVATION AND RUBBLE MASONRY.

GLOVERSVILLE, N. Y.

Proposals are wanted at once for the whole or part of 150,000 yards of earth excavation and 5,000 yards of rubble masonry. Special advantages for machinery. Information will be given by

J. LEROY BURR, Clerk,
41-1t Gloversville, N. Y.

MASONRY.

BOSTON TRANSIT COMMISSION.—CHARLESTOWN BRIDGE.—Sealed bids for building three sections of the Charlestown approach for the Charlestown bridge will be received by the Boston Transit Commission, at its office, 29 Beacon Street, Boston, Mass., until 12 o'clock m. of Thursday, October 21, 1897, and at that time and place will be publicly opened and read. No bid will be received and deposited unless accompanied by a properly certified check for the sum of Five Thousand Dollars, payable to the order of the Treasurer of the City of Boston, which check will be returned to the bidder unless he fails to execute the contract, should it be awarded to him. Notice to contractors.—Bid, contract, specifications and bond can be obtained and plans can be seen at the office of the City Engineer, City Hall, Boston, on and after Tuesday, October 12, 1897. The Commission reserves the right to reject any and all bids.
GEORGE E. CROCKER, Chairman; CHARLES H. DALTON, THOMAS J. GARGAN, GEORGE F. SWAIN, HORACE G. ALLEN, Boston Transit Commission.
B. LEIGHTON BEAL, Secretary. 41-1t

NOTICE TO CONTRACTORS.—CITY OF BOSTON.—Boston Transit Commission. Sealed bids for building Section 11 of the subway will be received at the office of the Commission, 29 Beacon Street, Boston, Mass., till 12 o'clock m. of Thursday, October 28, 1897. Each bid must be accompanied by a certified check for the sum of $2,500. The section is under and near the site of the old Boston & Maine Station at Haymarket Square. A portion of the subway will be an open incline with concrete and granite side walls and the remaining portion will be covered. The covered structure will consist of a combination of steel and masonry. Some of the items are estimated to be as follows: 14,000 cubic yards earth excavation; 210 tons iron and steel, furnished by Commission, to be set in place; 6,000 cubic yards concrete, stone and brick masonry; 22,000 linear feet of piles in place. Plans can be seen and specifications and forms of contract can be obtained at 29 Beacon Street, fifth floor. A bond will be required for the faithful performance of the contract in a sum of twenty per cent. of the amount. The Commission reserves the right to reject any and all bids and reserves the right to award the contract as it deems for the best interest of the City of Boston.
GEO. G. CROCKER, Chairman;
CHARLES H. DALTON,
THOMAS J. GARGAN,
GEORGE F. SWAIN,
HORACE G. ALLEN,
Boston Transit Commission.
HOWARD A. CARSON, Chief Engineer.
41-2t B. LEIGHTON BEAL, Secretary.

U. S. ENGINEER OFFICE, 905½ East Main St., Richmond Va., Sept. 27, 1897.—Sealed proposals for deepening and widening channel of James River, Va., and for constructing, repairing and revetment of wing-dams will be received here until 12 m., October 27, 1897, and then publicly opened. Information furnished on application here to H. D. Whitcomb. CHAS. J. ALLEN, Lt. Col. Engrs. 39-4t

U. S. ENGINEER OFFICE, Pittsburg, Pa., Sept. 20, 1897.—Sealed proposals for constructing SIX LOCKS AND DAMS on Monongahela River at and above Morgantown, will be received here until 12 m., October 30, 1897, and then publicly opened. Plans may be seen here. Information furnished on application. C. F. POWELL, Major, Engrs. 38-4t

U. S. ENGINEER OFFICE, Wilmington, Del., Sept. 30, 1897.—Sealed proposals will be received here until 12 o'clock noon, November 1, 1897, and then opened, for removal of wreck of steamboat Delaware from Christiana River. For information apply to WM. F. SMITH, U. S. Agent. 40-4t

U. S. ENGINEER OFFICE, Custom House, Cincinnati, O., September 23, 1897.—Sealed proposals for building locks numbered two, three, four and five, Ohio River, will be received here until 2 p. m., October 26, 1897, and then publicly opened. Information furnished on application to MR. WILLIAM ROTH, Davis Island Dam (P. O. Box 670, Pittsburg, Pa.), or to W. H. HEUER, Maj. Engrs. 39-4t

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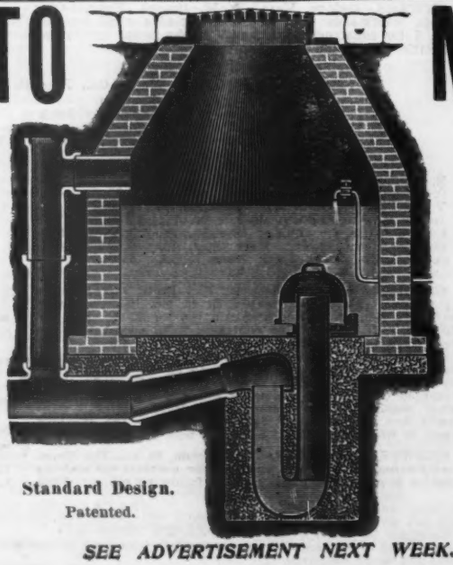

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